

The History of Bookbinding Technique and Design

*A series of reprint volumes, original
monographs, and translations
relating to the history of bookbinding.*

Edited by
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McFarlin Library
The University of Tulsa

Bibliopedia
by John
Hannett

with
Brassington's Memoir
of Hannett



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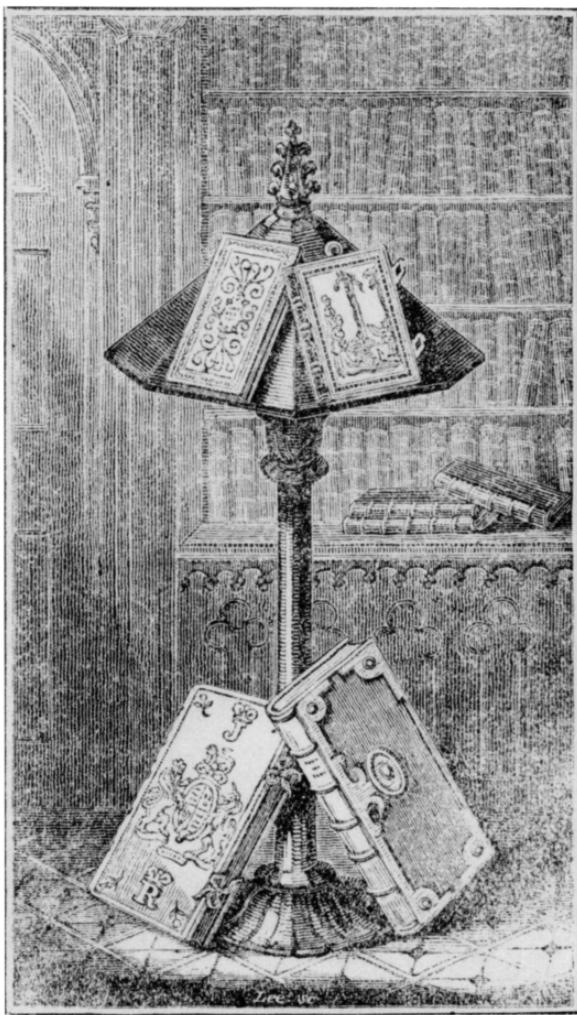
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*Facsimiles of Ancient Bindings.
(See page 206.)*

Bibliopegia;
or,
BOOKBINDING:

IN TWO PARTS.

Part I.

THE BOOKS OF THE ANCIENTS,
AND
HISTORY OF THE ART OF BOOKBINDING.

Part II.

THE PRACTICAL ART OF BOOKBINDING.

BY JOHN HANNETT.

The Sixth Edition,
ILLUSTRATED WITH NUMEROUS ENGRAVINGS.

LONDON:
SIMPKIN, MARSHALL, AND CO.
1865.

P R E F A C E.

In presenting the sixth edition of "Bibliopedia," the author has prefixed "The History of the Art of Bookbinding," which he hopes will render the work more acceptable to the trade and public generally.

In this edition the various additions in the progress of the Art, and improvements in Machinery, which have been brought into practice, are introduced, the work further illustrated by additional plates, and it is believed that nothing has been omitted of real importance, that might contribute to render it as complete as possible.

PREFACE TO FIRST EDITION OF PART I.

The following work aspires to the rank of a historical and chronological record of the art and science of composing books, and their subsequent embellishment,—a subject so intimately connected with literature, as to have ever been a matter of much speculation to the antiquarian and man of letters, as well as of great interest to the artist and general reader.

To the perusal of the works of Ames, Palmer, Stower, Hansard, and Johnson, on the History of Printing, may a desire to collect the dispersed records of the much older Art of Bookbinding, and to perpetuate the still existing specimens of the talent of early times (many fast hastening to, and all in progress of, decay), be said to have arisen, and the appearance of the present work be attributed. To effect this object the slight notices of the form of books, and remarks on their embellishment, found in numerous publications devoted to bibliographical subjects, to the histories

of countries, of a people, or of individuals, have been collected. These, as now arranged in chronological order, and embodied with a historical record and dissertations founded on personal inspection of many ancient bindings, will, it is presumed, be found to possess an interest and variety not hitherto attached to the subject.

PREFACE TO FIRST EDITION OF PART II.

The following Treatise, in which will be found a variety of new, interesting, and valuable information, it is trusted, will supply a great desideratum ; no work relative to the Art of Bookbinding having been published in this country, that can be placed in the hands of the workman, calculated to assist him in the most important manipulations of his Art.

To render it of the greatest utility, the utmost care has been taken to give the most clear and comprehensive directions, in every department of the various processes required in binding a book, from the folding to the final operation ; and though some slight imperfections may have crept in, from the difficulty attendant on the investigation of a subject, respecting which little information could be derived from previous writers, it will be found that nothing has been omitted that could render the Work as complete as possible. To this end, in addition to his own practical knowledge of the Art, the Author has availed himself of the communications of the best workmen, and also of such parts of the productions of M. Dudin, M. Leane, M. Normand, M. Mairet, &c., as experience has proved useful in practice.

Difference of opinion will doubtless arise as to the propriety of making known the more difficult operations of the Art ; but Science never lost by its general diffusion, and the clever workman will ever retain the elevated position which his taste, ingenuity, and attention entitle him to. With this view the work is submitted to the Trade, and public generally, as a miscellany of real practical utility, and a record of the present state of the BIBLIOPEGISTIC Art.

BIBLIOPEGIA;
or,
BOOKBINDING:

Part I.

THE BOOKS OF THE ANCIENTS,
AND
HISTORY OF THE ART OF BOOKBINDING.

THE
BOOKS OF THE ANCIENTS,
&c.

CHAPTER I.

ON THE RECORDS AND WRITINGS OF THE EARLIEST
PEOPLE; THEIR FORM, AND METHOD OF PRESER-
VATION.

IN the darkness of ages, the arts and sciences generally have been enveloped in obscurity:—of many, not even the record of their existence, and of others, merely the passing mention of their once general prevalence, has been handed down to us. And whilst those arts which must of necessity have first occupied the thoughts and attention of mankind, such as would contribute to their personal comfort, to the supply of their wants, or to the defence of their position and home, are scarcely known, we can little expect that anything approaching to the refinements of life, such as the records of their literature, will be met with. In the brief notices of the transactions of man soon after the creation, we find Jubal

referred to as the father of all such as handle the harp and organ, and Tubal-cain as an instructor of every artificer in brass and iron. To this may be added, the knowledge the earliest people possessed of the art of wine-making, of navigation and ship-building, as implied in the formation of the ark of Noah, of building and architecture, in the erection of the city and tower of Babel, of the making of arms for trained fighting-men, of images, of camels' furniture, and of chariots of war. And if we descend to the date assigned by Dr. Good^a to the Book of Job, namely, 1200 years after the flood, it is certain that at that epoch metals were extracted from the earth and used for domestic purposes, for instruments of war, and for money; that various musical instruments were known, that written characters were in common use, that astronomy was cultivated as a science, and that mankind unquestionably were not living in the simple patriarchal state, since different ranks in society are in several instances familiarly mentioned; whilst it is at the same time quite evident, that the degree of intellectual acquirement and of refinement which would allow of the composition of the work itself, could not have been low in the scale of human cultivation.^b Considering these facts, and reasoning from the general improvement of society in all ages, where men have

^a Good's Book of Job, p. 46.—^b Beke's *Origines Biblicæ*, vol. i. p. 52.

congregated together, it may be pronounced all but certain, that some degree of refinement, and a regard for learning, had been arrived at by the antediluvian world, particularly so when the general belief of the Mosaic account gives a period of 2000 years duration to the earth prior to the deluge.

Of the mode adopted in the earliest times to transmit to after generations the records of the preceding ones, an impenetrable darkness hangs around; and in attempting any description, conjecture alone can be the foundation. And if this uncertainty as to the very existence of their records is the case, how much more difficult becomes the path by which we can draw any conclusion as to the material of which they were composed, or of the manner of preserving them. That the antediluvians did arrive at a considerable degree of proficiency in many of the arts, has been shown, and we may fairly conclude that some method had been invented, by which the thoughts and opinions of the learned might be communicated in some more durable manner than oral testimony. But nothing exists to prove this to be so; we, therefore, are left to draw the inference, from what has been transmitted relative to later times, that a similar mode had been adopted, and progression made, in periods anterior to them. Taking this as our guide, and allowing that there is much on the subject we must be content to remain ignorant of, it will be necessary to ascertain what has reached us relative to the materials on, and form in, which

the early inhabitants of the earth inscribed their records.

Engraving, or sculpture on stone, appears to have been the first method of writing; the great and noble actions of nations and men were cut on entire rocks and mountains.^c This custom was continued for many ages, and remains still exist in Denmark, Norway, the deserts of Tartary, and Judea. The absence of rocks in many situations, or for the better keeping before the eye of youth the acts and deeds of their forefathers, doubtless suggested the pillar or column. Josephus makes mention of two, one of stone, the other of brick, on which the children of Seth wrote their inventions and astronomical discoveries.^d Porphyri also speaks of some stone pillars in Crete, on which the ceremonies of the Corybantes in their sacrifices were recorded.^e Many of the obelisks brought from Egypt are of this character, and there are some ancient monuments of the same kind of writing remaining in that country, more particularly among the ruins of Persepolis.^f These inscriptions commemorated events in history and discoveries in science, and to them the ancient historians, Sanchoniatho and Herodotus, acknowledge their obligations.^g Mr. Drummond, however, is of opinion that the first essays in the art of writing

^c Job xix. v. 24.—^d Antiquities of the Jews, book i. c. 2.

—^e Warton's English Poetry, vol. i. p. xxvii. &c. —

^f Maurice's Babylon, p. 186.—^g Herculaneum;—Hon. W. Drummond, p. 98.

must have been on softer materials than stones. Whether so or not, it is certain that the time and labour necessary to carve on stone, would soon lead men to consider of some more expeditious mode of recording their thoughts and discoveries; as well as to multiply their number. We find clay was early used for the purpose, and stamps made by which it was impressed, and then submitted to the action of the sun or fire to harden.^b To this class the Babylonian bricks belong, the inscriptions on which doubtless were intended for the propagation of science, to the inculcation of some special facts, or the record of some useful memorial.^c And though the meaning of these inscriptions is unknown, the preservation of some of the bricks through a period of some thousand years, proves that the ancients rightly calculated on the mode they adopted in perpetuating their discoveries. These bricks were employed in the building of their public edifices. From them further advances were made, which ultimately led to the formation of books. This progress is shown in the following sketch of a burnt clay pillar, of about the same period as those before referred to. It also displays a considerable improvement in the formation of the characters. This pillar, with severa of the bricks, are preserved in the library of Trinity College, Cambridge.

^b Fosbroke's Cyclop. of Antiquities, vol. i. p. 235.—
^c Hansard's Typographia, p. 2.



Mr. Hansard, who minutely examined this pillar, considered it a rare piece of ancient learning and art, and a work of great public importance at the time it was executed. He says: "One of these printed pieces might contain a complete subject; or a subject might occupy several of them, which altogether formed a series; each piece answering, as it were, such a purpose as the leaf of a book; one following another in regular order, from the beginning to the end of any subject, as the sheets in a volume. From

a succession of these printed miniature monuments might numerous sets be made; and thus might laws, astronomical observations, historical annals, and any other subject of interest to mankind, be recorded."^k

This opinion, there can be little doubt, is a right conclusion. And to confirm it we find, even long after the acknowledged period of the invention of letters, that engraving on similar pillars of stone and other durable substances was still adopted. Pollux and Suidas state that the pieces of brass on which the public documents in their time were written, were of a cubical form.^l

The first books, then, if we may so call them, were simply in the form of pillars or tables, of which frequent mention is made in Scripture under the name of *Sephir*. When, however, the ancients had matters a little longer to treat of, they would adopt materials more suited to their purpose. Hence, wood, slate, horn, plates of lead and copper, leaves of trees, and other materials, according to the local circumstances of different nations, and their progress in the arts, were used to write such things upon as they were desirous to have transmitted to posterity.^m

That a ready mode of writing was in general use, or at least well understood by the learned, previous to the delivery of the tables of the law, is proved by the command given to Moses, " Write this for a me-

^k *Typographia*, p. 10.—^l *Herculanensia*, p. 104.—
^m *Fosbroke's Ency. of Antiquities*, vol. i. 236.

morial in a *book*." It is observable, that there is not the least hint to induce us to believe that writing was then newly invented: on the contrary, we may conclude, that Moses understood what was meant by *writing in a book*; otherwise God would have instructed him, as he had done Noah in building the ark; for he would not have been commanded to *write in a book*, if he had been *ignorant of the art of writing*: but Moses expressed no difficulty of comprehension, when he received this command.* He may have become acquainted with the art of writing in Egypt, which country, we learn from the Old Testament, was long previously acquainted with all those arts of civilization and government, and notions of property, which usually belong to nations which have been long settled and civilized.

Slight as are the notices of the writings of the early ages of the world, little can here be stated relative to ancient bookbinding, but that some mode of preservation of documents which must have required so much care to execute, was early devised, cannot be doubted; and therefore the art may be dated as almost coeval with the science of composing books: and that both one and the other would soon follow the invention of hieroglyphic characters and letters, though it must be after the latter period to which we must look for anything that can decidedly be called

* Astle's Origin and Progress of Writing, pp. 12, 13.—
• Sharpe's Early History of Egypt, p. 4.

bookbinding. Previous to this, the preservation of their tables, &c., was by means of cases of wood, stone, or earthenware, of which we have an example in the commandments given to Moses. But that writings in his time were of some extent, is shown in the book of Exodus (xxiv. 4—7), where we find that Moses *wrote* all the *words* and all the judgments of the Lord, contained in the twenty-first and two following chapters. What was the material, or what the form of the original book of the law, cannot be ascertained. Montfauçon believed it was written on skins; and considering that the roll is the form still adopted in all the synagogues of the Jews, we shall not be hazarding too much to state it to have been so since its first promulgation by Moses to the people. Some progress must have been made before this; and at whatever period books were first formed, a necessity would arise of uniting the several parts together, for the more ready reference, as well as their better preservation. This, however slight or rudely performed, was the foundation of an art, which in our day has arrived at a style of decoration scarcely to be surpassed by any other.

That the writers of the books would be the first binders, it is fair to presume; from which class, perhaps, or from others trained to the art, would proceed a race of artisans restricted to this branch alone. But there is again no data to establish the fact, and we can only hazard the conjecture, seeing that the details of all the arts for many ages are alike unknown.

10 THE RECORDS OF THE EARLIEST PEOPLE.

This may be attributable to the circumstances of the times, or to the habits of the nations of antiquity. The Chaldeans, Phoenicians, Syrians, and Egyptians, all bordering upon each other, were alike early versed in the arts of life. From all that is known of the latter, either from Greek authors or from modern discoveries in the antiquities of Egypt, they appear to have been a nation of practised manipulators, mechanics, and workmen. The distribution of the people into ranks, and particular occupations to the same families from generation to generation, confined the knowledge possessed by each class, and never contributed to form a common stock of information. Hence the political system of the country provided for a succession of hereditary artists; and when that system was destroyed by the conquest of Egypt, the *peculiar* arts of the Egyptians were entirely lost.^p

But the remains of their greatness, and evidences of their ability, were an example to their conquerors. The Greeks have abundantly borne testimony to how much the world is indebted to the Egyptians for architecture, geometry, agriculture, irrigation, letters, and paper. To some of these we shall more particularly allude in the next chapter.

^p Brayley's Utility of the Knowledge of Nature, p. 57—59.

CHAPTER II.

BOOKS FROM THEIR FIRST KNOWN FORM, AND BOOK-BINDING IN THE TIMES OF THE GREEKS AND ROMANS.

A RAY of light now beams on our subject, for though time, and the ravages of war, have swept away, with few exceptions, all the original written documents, records, and literature of the once powerful and learned nations of the earth, still we are now enabled, by the notices met with in ancient writers, to speak with certainty of the materials on which the first known books were written and the form in which they were made up, as well as of the covering adopted for their greater security.

The first books were square, and consisted of but one leaf, or tablet. These were composed of wood, &c., as before stated. The etymology of the word *book*, and its equivalent in many languages, indicates that they were originally written on vegetable substances. Thus, from the Greek *biblos*, the Latin *liber*, *codex*, *folium*, and *tabula*, we learn that books were sometimes inscribed on the inner bark and

sometimes on boards cut off the main body of the tree; and the English word *book*, derived from the Saxon *boc*, the root of which is the northern *beuch*, a beach or service tree, evidently shows that the books of our ancestors were of a similar fabric. Thus we find that the leaves of the palm tree,^a and the finest and thinnest part of the bark of such trees as the *tilia*, the *philyra*, a species of linden, the lime, the ash, the maple, and the elm, were first used when men began to extend their writings and disquisitions.^b This custom existed in the time of Ulpian, who mentions it, and even still continues in nations where little progress has been made in refinement, copies of books being frequently brought to this country from the east, written on oblong slips of bark or reed, fastened together by strings at each end. In Ceylon they still write on the leaves of the talipot: and the Bramin MSS. in the Talinga language, sent to England from Fort St. George, are written on leaves of the *Ampana*, or *Palma Malabarica*.^c Numbers of these books, executed in a fine and beautiful character, and bound together with boards, may be seen in the library of the East India Company. A very curious library of this description was discovered some time ago among the Calmuc Tartars, by the Russians. The books were exceedingly long and narrow, the leaves very thick and made of bark of trees, smeared over with a double

^a Pliny, l. xiii. 10.—^b Astle's Writing, p. 201.—^c Horne's Bibliography, vol. i. p. 42.

varnish ; the ink or writing being white on a black ground.⁴

The early writers successively made use of linen and cotton cloths ; of the skins, intestines, and even shoulder blades, of various animals ; of table books of wax, ivory, and lead ; of the skins of fishes ; and of the intestines of serpents. To some of these we shall have again to refer, in the course of our researches. These substances, in those countries where knowledge and letters had made some progress, soon fell into disuse on the introduction of the Egyptian papyrus, which unquestionably is the earliest of any of the various kinds of paper with which the ancients were acquainted. It was in very common use in the time of Alexander, but the exact date of its discovery is unknown ; and even where it was first made is matter of dispute ; but it is very evident from the ancient papyri found at Thebes and elsewhere, and from Isaiah xix. 7, that it was used for writing long before the period above referred to. According to Isidore, it was first made at Memphis ; and according to others, in Seide, or Upper Egypt. It was manufactured from the inner films of the papyrus, or biblos, a sort of flag or bulrush, growing in the marshes of Egypt. The outer skin being taken off, the films or inner skins were separated from the stalk, laid on a table, moistened with the glutinous waters of the Nile, and afterwards

⁴ Hist. de Academy, R. Inscriptions, tom. iii. p. 6.

pressed together, and dried in the sun.* Bruce, the African traveller, who made some experiments on the subject, however, denies this property of the waters of the Nile.

Successive experiments in the manufacture of skins ultimately led to the invention of vellum or parchment. This discovery is attributed to the prohibition of the exportation of the papyrus from Egypt, by one of the Ptolemies; in order to throw an obstacle in the way of Eumenes, king of Pergamus, who endeavoured to rival him in the magnificence of his library.^f Thus left without material, we find from Vossius that Eumenes invented a method of cleaning skins on both sides, before only written on one. It was called *Charta Pergamena* from the name of the capital. Parchment or vellum was also used in Egypt. Pliny says—

"Mox *æmulatione circa bibliothecas regum,*" &c.

The same is related by Cælian and Hieronymus with little variation.^g The Saracens had beautiful parchment, equal in appearance to paper.^h

Having thus shown the nature of the materials of which the ancients composed their books, and which, in the infancy of the art, is so intimately connected with bookbinding as to form a part of the subject, we shall now proceed to the consideration of the form first adopted, the mode of preservation, and the

* Townley's Illustrat. of Bib. Lit. i. 45.—^f Bayle, Chalmers, &c.—^g Herculaneum, p. 106.—^h Gibbon's Rome, ix. 51.

style of ornament in use in early times. The first form, when more flexible materials began to be used, was the roll, called by the Romans, *volumina* and also *scapi*.¹ This, doubtless, was the most ancient mode of binding, and at first consisted in sewing the different sheets or leaves together, till the volume or book was finished. Only one book was included in a volume, so that a work generally consisted of as many volumes as books. They might measure, when extended, one yard and a half wide, and fifty long.² They were written in separate pages, and fastened parallel to each other, so that the reader perused one page, then rolled it up at one end, unrolling the next page and so on to the end, as is seen in the following engraving from a painting found at Pompeii.



¹ Ency. Methodique.—² Fabricius' Bibl. Antiq. c.xix. p. 607.

Of the great and early skill in making these rolls, an instance is found in Josephus, in reference to a copy of the law, sent to Ptolemy Philadelphus, which was written in letters of gold, upon skins so artfully put together, that the joinings did not appear.^m The most extraordinary papyrus that perhaps exists in any collection, is a funeral roll discovered at Memphis, and now in the British Museum. It is considered to be about *three thousand* years old, and appears to relate to a scribe of high rank named *Nebsenai*, of the temple of *Pthah Sokar*. When entirely opened, it is considered this roll will measure one hundred feet in length.

The GREEKS derived their first knowledge of the *roll* from the EGYPTIANS, and the style passed for a long series of years under the name of *Egyptian binding*. This continued the general form for many ages, the libraries of the Greeks and Romans consisting of rolls for some centuries after the Christian era. And it will now be seen that the whole arcana of the manufacture and binding of books was well understood by these once powerful people.

The writings of the Greeks do not furnish any detail as to the mode of binding books, but that they were fully alive to the importance of the subject, may be inferred from the circumstance of the Athenians erecting a statue to the memory of *Phillatius*, the discoverer of a substance to make the pages or

^m *Antiq. of Jews*, book xii. p. 405.

sheets adhere together.* But the writers among the Romans, who doubtless obtained much of their knowledge from the Greeks, enter into the minutia of the art, and thus furnish us with every thing necessary for a full description of the form and mode of preservation of the records of early times. The Romans had their *librarii*, *librarioli*, *bibliopeci*, and *bibliopola*; answering to our *printer*, *engraver*, *binder*, and *bookseller*. The *librarii* multiplied books by transcribing MSS.; the *librarioli* illustrated them by ornament on the title-pages, margins, and terminations;—the *bibliopeci* employed their skill on the embellishment of their exteriors:—and the *bibliopola* were engaged in the disposal of them.

It is with the *bibliopecus* that we have more particularly to interest ourselves in this treatise, and of his functions we shall, in the general description of ancient bindings, have constantly to speak. The duties of the other branches employed in the production of books will be introduced in illustration of various references it will be necessary to make relative to the form of ancient records.

In the infancy of the art, the sheets or pages, it has been stated, were fastened, or sewn together by strings. The damage caused by this proceeding, where the material was so frail as the papyrus, led to the invention of paste or glue by an Athenian, whose countrymen, Olympiodorus states, accorded

* *Noveau Traité de Diplom*, tom. iii. p. 60.

to him the honour before referred to. Of its use for this purpose, Cicero, in a letter to his friend Atticus, has left a proof,* and Pliny confirms it. Pollux also mentions writers and vendors of books, and the glutination of them.*

When the sheets intended to form one volume or book, were thus attached together, another, generally of parchment, was in like manner fastened to the left margin of the first page, for the purpose of forming the cover, and another at the termination. The interior of the first was reserved for the dedicatory epistle, and which, from its being found on the opening of the roll, *a limine*, was called *liminaire*. After the embellishment of the work by the skill of the *librarius*, it then passed into the hands of the *bibliopecus*.

The first operation of the Greek and Roman book-binder was to cut the margins above and below perfectly even, and the sheets at beginning and end square. He then gave the exterior the most perfect polish possible by means of the pumice-stone, with which substance the writers had previously smoothed the interior. Horace, Pliny, Martial, Ovid, and Catullus all bear testimony to this use of the pumice, and to the present day it is adopted by bookbinders in some of their operations.

The cover, which was called the *involutrum*, was then fastened to a cylinder of wood, round which the volume was rolled. Porphyrio states they sometimes were formed of bone, and sometimes even of

* Book iv. 4.—^p Book vii. 33.

gold.¹ They had frequently one of these rollers at each extremity. At the ends of the cylinder a ball or knob was then affixed, which was employed as a handle for evolving the scroll, it being at one time a reputed crime to take hold of the roll itself. The outside of the volume was called *frons*, the balls at the end *umbilici*, or, according to Ovid and Tibullus, *cornua*. These were generally made of bone, wood, or horn, and often carved and adorned with ivory, silver, gold, or precious stones.² The value or importance of the manuscript was sometimes indicated by the style of ornament introduced upon these bosses, and many of them, without doubt, were inscribed in the centre or round the edge with the name of the author of the work. It appears, however, from the papyri found at Herculaneum, that this expensive style of embellishment was not general, but that many of their writings were simply rolled up, with a ticket or label attached to the centre, bearing the title of the work, as shown in the following engraving of some of the rolls discovered there.



¹ Dibdii's Bib. Decameron, vol. ii. p. 430.

² Fabric. Bibl. Antiq. c. xix, p. 607.

This illustration also gives a further idea of the form of ancient books.

The cover, which, according to Achilles Statius, was at first woven of the fibrous bark of some tree, was embellished by the addition of colour and ornament. Purple and scarlet were the most general. Martial says

“Sunt quoque mutatae ter quinque volumina formæ,
Purpureo fulgens habitu, radiantibus uncis;”

and speaking of a *libraria* opposite the *Forum Julii*, “There you may buy Martial, polished with pumice-stone, and ornamented with purple, for five denarii.”* But in another epigram he enters into the details of the binding of a book in his time—

“Featina tibi vindicem parare,
Ne nigram cito raptus in culinam
Cordyllas madida tegas papyro,
Vel thuris, piperisque sis cucullus.
Faustini fugis in sinum? Sapisti.
Cedro nunc licet ambules perunctus,
Et frontis gemino decens honore
Pictis luxurieris umbilicis;
Et te purpura delicata velet,
Et coco rubeat superbus index.”†

We see herein that the patronage of literary efforts was then considered of some value, and that the work of the poet was about to appear under that of *Faustinus*. The leaf perfumed with oil of cedar, and decorated with a double ornament, the painted bosses, the bright purple cover, and the magnificent title in red letters, gives an idea of the splendour of the

* Epigram i. 118.—† Epigram ii. book 2.

whole appearance. To this notice of what Martial wished to be performed on his work, another proof of the elegance of some of the Roman books is found in the directions given by Ovid relative to the omission of all ornament. The poet in exile, sent his book to Rome, and directed that it should be presented in a simple manner, typical of grief and affliction, "in the costume of an exile."

"*Nec te purpureo velent vaccinia fuso:
Non est conveniens luctibus ille color.
Nec titulus minio, nec cedro charta notetur:
Candida nec nigra cornua fronde geras.
Felices ornent hæc instrumenta libellos:
Fortunæ memorem te decet esse meæ.
Nec fragili geminæ poliantur pumice frontes:
Hirsutus passis ut videare comis.*"*

Let not, he says, violets adorn it with their purple dye,* that colour is not suitable to grief, nor let the title be ornamented with vermillion, nor the leaf with cedar. He wishes no exterior embellishment to appear, and the polish of the pumice to be omitted, so that the roughness and remnants of hair remaining on the parchment might convey the idea of his own, through his affliction, "that it may appear rough with dishevelled hair."

Horace^v and Tibullus^x confirm all that has been advanced above on the practice of the art among the Romans, and many other passages in Martial might

* Ovid de Tristibus, Eleg. ad Librum, 1.—^v Epistle xx. 1.
—^x Book iii. eleg. 1.

* Servius says that *vaccinia* were violets of a purple colour.—Pliny that it was a shrub in Gaul adapted for dyeing.

be quoted to the same effect. Tibullus appears to refer to a cover coloured with yellow :—

“*Lutea sed niveum involvat membrana libellum;*”

but it may be a question whether the colour of the parchment, of which the cover was formed, and which assumes a yellow appearance from age, is not the right construction of the passage.

To Catullus we are indebted for a minute and elaborate description of ancient binding. In the dedication to Cornelius Nepos he writes—

“With pumice dry, just polished fine,
To whom present this book of mine,
This little volume, smart and new.”^x

And in another of his poems, in ridicule of a person named Suffenus, he gives us what may be considered a complete description of the best binding in the time of Cicero :—

“AD VARRUM.

“Suffenus iste, Varre, quem probe nosti,
Homo est venustus, et dicax, et urbanus;
Idemque longe plurimos facit versua.
Puto esse ego illi millia aut decem aut plura
Perscripta, nec sic, ut fit, in palimpsesto
Relata; chartæ regiæ, novi libri,
Novi umbilici, lora rubra, membrana
Directa plumbo, et pumice omnia sequata.”,

which has been thus rendered :—

“Suffenus, that wretch, whom my Varus well knows,
So pretty, so prating, so over polite,
Has a genius for verse that incessantly flows,
Has a muse which ten thousand fine things can indite.

^x Catullus, English Translation, 2 vols. 8vo.—^y Ode 22.

His paper is royal, not common, or bad;
His wrappers, his bosses, are totally new;
His sheets smooth'd by punice, are all ruled with lead,
And bound with a riband of rose-coloured hue."*

The reference to the covers and bosses being of a new character, shows that the custom was to introduce great variety in the style of ornament. The *directa plumbo*, M. Peignot, in his *Essay on the Books of the Ancients*, thinks refers to the parchment of which the cover was composed, being cut with a square, from Catullus appearing to direct attention to the exterior form and condition of the binding; and further grounds his opinion from the book or roll being described as written on *chartæ regiae*, and the covers being of parchment, *membrana*, as above described.

The *lora rubra* of Catullus were two strings of coloured riband or leather, attached to the last sheet or cover of the volume, round which, when it was rolled up, they were fastened so as to keep the whole tight and firm, and prevent the introduction of dust and insects.

On the outside of the cover the title of the work was generally inscribed. Chrysostom, who flourished in the fourth century, and who, doubtless, founded his argument on what he had frequently seen done at Constantinople, or by the more eastern princes who had business to transact with the Greek emperors, very particularly alludes to this custom. In his re-

* English Translation.

marks on a disputed passage of the Bible, he observes that it referred to the title written on the wrapper, which signified "The Messiah cometh." And Aquilla, who flourished one hundred years earlier, gives the same interpretation.^a This suggests a more distinct idea of the passage; as when referred to the case in which the roll was enclosed, the impression becomes clear and energetic, implying that the subject of the book is that "the Messiah cometh," which title might with great propriety be wrote or embroidered on the wrapper or case in which it was kept.^b

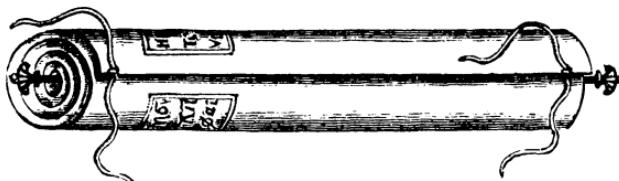
The title consisted of a square piece of fine vellum or parchment, glued on the cover in such manner that, when rolled up, it appeared near the top, something similar to the titles of the books of the present day. For this purpose the finest description was selected. Cicero begs his friend to send him two of his workmen, and wishes them to bring some fine parchment, for making the titles of the books.^c These title pieces were generally of a darker colour than the cover, and the letters formed of gold.

Recent discoveries have confirmed these views. The collection of James Burton, Esq., formed during his travels in Egypt, contained some specimens of papyrus rolls, discovered in the tombs at Thebes, which fully illustrates the subject, and also prove a

^a Calmet's Dictionary, vol. iii. p. 129, ed. 1836.—^b Harmer's Observations on Scripture, vol. iv. p. 10.—^c Letters to Atticus, iv. 4.

considerable advance in the art by the Egyptians. One, in the hieroglyphic character, is inclosed in a curiously worked piece of leather, and has been covered with gold. Another contains a short inscription on the outside, and a third, now in the British Museum, a long one on the cover.

These specimens also show that the ancients were well acquainted with the process of gilding on leather and other substances, and that they so embellished the covers of their books is now placed beyond question. It is evident the art of impression was well understood, as we find from the Scriptures that seals and coins were in use from the earliest periods, as well as brands and other instruments for the purpose of marking. Virgil makes mention of brands with letters being used in his time for marking cattle, &c. with the owner's name. The various seals, found in the tombs, and brought from Egypt in our day, as well as the certainty of many of their ornamental decorations being formed by pressure, abundantly confirms all that ancient writers have recorded.



The engraving gives the general appearance of the roll when completed.

From the perishable nature of the material of which the rolls and their coverings were composed, and the destruction of them in the war and strife of nations, it is seen that very few perfect specimens have been preserved to our times. The excavations at Herculaneum, the discovery of the ruins of which took place in 1713, has thrown some further light upon the subject. Here, after a lapse of nearly two thousand years, 1756 papyri have been acquired. Thirty-nine years after its first discovery, in making an excavation in a garden at Resina, in the remains of a house supposed to have belonged to L. Piso, were found a great number of papyrus rolls. They were ranged in presses round the sides of a small room, in the centre of which was a sort of rectangular book-case; many of the rolls were at first destroyed by the workmen, who, from the colour given by age, took them to be sticks of charcoal. When, however, it was discovered that they were ancient manuscripts, the attention of the learned was directed towards their preservation. Father Piaggi invented a machine which is still employed for unrolling them, but many of them have been destroyed,—some crumbling into dust on the slightest touch. His late majesty, George IV., then prince of Wales, took much interest in the matter, and at his own private cost employed several gentlemen in the task of unrolling and decyphering them.^d Among others, Sir H. Davy visited the spot for the

^d *Herculanusia*, preface i.

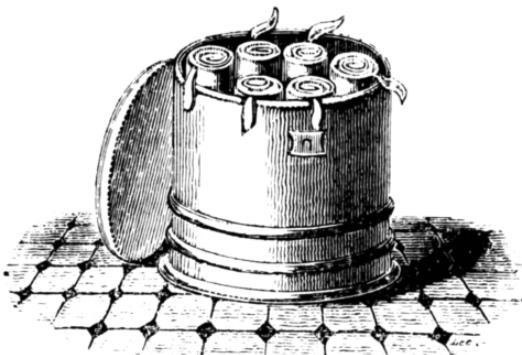
purpose of assisting, but from some supposed impediments which obstructed his research, gave up the experiment, after a little success had attended his endeavours. It is to the shape of these rolls, and the coverings they may have had, we have to refer: in shape, the engraving at page 19 gives a correct representation, and of the state in which they were found, two letters received in this country, about the middle of the last century, present a full account. One, from Camillo Paderni, keeper of the museum at Portici, among other things, describes a room, the floor of which was formed of mosaic work. He says, "it appears to have been a library, adorned with presses, inlaid with different sorts of wood, disposed in rows, at the top of which were cornices." He was buried in that spot more than ten days; he took away three hundred and twenty-seven manuscripts, all in Greek characters; there was also a bundle, consisting of eighteen volumes, *wrapped round with bark of tree*; they were Latin. The second, from another person, describes a chamber of a house in Herculaneum, where was found a great quantity of rolls, about half a palm long, and round; they appeared like roots of wood, all black, and seeming to be only of one piece; one of them falling on the ground, it broke in the middle, and many letters were observed, by which it was first known that the rolls were of papyrus. There were about one hundred and fifty rolls in wooden cases, much burnt. This writer mentions the unrolling of a tract on music, by

Philodemus, which had about sixty columns, each column having twenty lines, of the third of a palm long. He also says there were Latin manuscripts, some of which were so voluminous, that, unrolled, they would take up a hundred palms.^c A long interval took place between the publication of this treatise and any subsequent fragments, and even up to the present time little further progress has been made.^d

In addition to the care and attention bestowed on the preparation and execution of these rolls by the ancients, they were not less mindful of their preservation. They employed a species of oil extracted from the cedar tree, to prevent their destruction from moths, worms, and other liable injuries.^e Pliny says that the books of Numa were preserved under ground for five hundred and thirty-five years, from having been rubbed with *cedrium*, and enclosed in boxes formed of cedar.^f The testimony of Ovid, Catullus, and others, has been before adduced as to its application for this purpose.

In addition to the coverings of the rolls, the ancients were accustomed to further protect them from injury by placing the most valuable in cases or chests of cedar wood, with the titles or labels at top in the following manner.

^c *Herculanensis*, 192.—^f *Edinburgh Review*, xlvi. 353—
and *Quarterly Review*, v. 1.—^e *Vitruvius*, ii. 11.—^b *Hist. Natura*, xiii. 13.



This case was called by them *scrinium*, and *capsa*, or *capsula*, and was generally of a circular form, from its readier adaptation to the shape of the rolls. The ancients, in times of war, devastation, and rapacity, buried their writings in the earth, and this may at first have given rise to the *scrinium*. We have an instance of this in the twenty-second of Jeremiah, where he ordered the writings which he delivered to Baruch to be put in an earthen vessel. Whatever it may have been originally, it became afterwards a general sort of *bookcase*. Catullus, in excuse to Manlius for not sending him some verses, pleads having only one box of his books with him. This also proves that they were in the habit of taking a number of books with them to whatever place business or pleasure might lead, forming a sort of travelling library, as one of these boxes would contain several volumes. Some of them were highly ornamented. One found

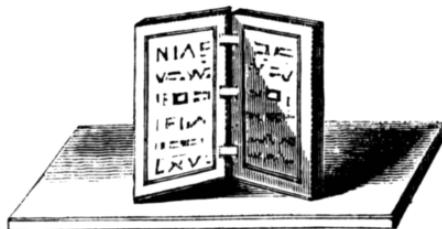
at Herculaneum, but which crumbled to dust soon after its discovery, bore busts of Demosthenes, Epicurus, Hermes, and Zeno.

While the roll was the form adopted for the lengthened works of the ancients, they appear for a long period to have made use of table books or *pugillaria*, for the purposes of taking notes, keeping accounts, &c. These were tablets of ivory, wood, or metal, thinly covered with wax, the writing upon which, with a stylus or iron pen, could be erased and written in again at pleasure.¹ Pliny^j states that the public acts, among the most remote nations were written in leaden books. The existence of books formed of this metal is further supported by the testimony of Job, Suetonius, and Frontinus. The eminent antiquarian, Montfaucon, purchased a book at Rome in the year 1799, which he describes as composed entirely of lead :—" It is about four inches long by three wide. Not only the pieces which form the cover, but also all the leaves, in number six, the stick inserted into the rings, which hold the leaves together, the hinges and the nails, are all of lead, without exception."^k It contained Egyptian gnostic figures, and writing. Montfaucon presented it to M. the Cardinal de Bouillon, but what has become of it is unknown. These leaden plates were frequently so extremely thin that they might easily be rolled up. Oeneas Philiorceticus tells us that they were beaten with a hammer

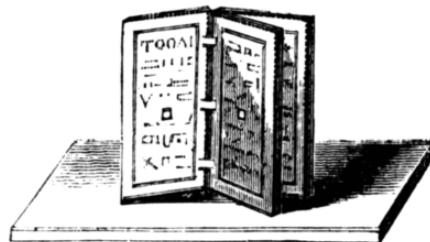
ⁱ Note to Catullus, Ode 39.—^j Nat. Hist. xiii. c. 1.—

^k Moutfaucon, Antiq. ii. 378.

until they were rendered very thin and pliable.¹ Catullus^m adverts to some wanton girl, who had jestingly stolen his pugillaria or poetical notes. One of these from Herculaneum is here represented.



They were connected together at the back by rings, and consisted of from two to six or eight leaves, having in the centre of each a slight projection or button, to prevent the notes on the wax being destroyed or defaced. According to the number of the leaves, they were called duplices, triplices, quintuplices, &c. The duplice has been introduced above, and from the same source we are enabled to present the triplice.



¹ *Herculancensia*, 100.—^m Ode 39.

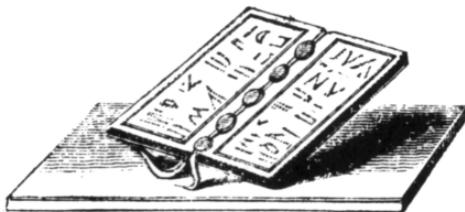
They were in use in the time of Homer, and according to Pliny were introduced before the Trojan war.ⁿ

"The dreadful token of his dire intent,
He in the *gilded tables* wrote and sent."^o

Martial^p makes mention of tablets of parchment covered with wax.

The convenience of the square form in these tablets ultimately led to its adoption for almost every description of writing. The honour of the introduction of binding, composed of separate leaves, as now universally practised throughout Europe, has been accorded to Eumenes, king of Pergamus, the same to whom we have before referred as the inventor of parchment.^q

When the folded form came into use, the necessity of a cover would become more apparent than for the rolls, and hence gradually arose bookbinding in its present shape.—At first the leaves were simply tied together with riband, the riband forming a hinge similar to the rings in the tablets before represented. The form and manner will be understood by the following engraving.



ⁿ Herculanesia, 101.—^o Homer's Iliad, vi. 168. —
^p xiv. ep. 7.—^q Vossius, Bayle, Montfaucon, &c.

The cover at first, no doubt, would be a simple leaf of parchment, or some other skin. This would soon be found of itself insufficient, and probably suggest the use of boards, which were very early adopted. Bruce, the Abyssinian traveller, had in his possession a large and very perfect manuscript on papyrus; "a gnostic book, full of their dreams," which had been dug up at Thebes, and which he believed was the only perfect one then known. Speaking of it, he says, "the boards or covers for binding the leaves, are of papyrus root, covered first with the coarse pieces of the paper, and then with leather, in the same manner as it would be done now. It is a book that we should call a small folio, and I apprehend that the shape of the book, where papyrus is employed, was always of the same form with those of the moderns." In this latter remark Bruce is decidedly wrong. "The woody part of the root of the papyrus served for boards or coverings of the leaves. We know that this was anciently one use of it, both from Alcæus and Anacreon. The Ethiopians use wood for the outer covering of their books, and cover them with leather."¹

A more recent traveller, Dr. Hogg, has added to our store of knowledge on the early form of books, in a description of two papyri found at Thebes. He relates that "among the various objects of antiquity which were purchased from the Arabs, at Thebes,

¹ Travels, vii. 8.

were two papyri, the one in Coptic, the other in Greek; both in the form of books. The Greek papyrus has been discovered to contain a portion of the Psalms. The leaves, of about ten inches in length, by seven in width, are arranged, and have been sewn together like those of an ordinary book. They are formed of strips of the papyrus plant, crossing each other at right angles. They were both discovered among the rubbish of an ancient convent at Thebes, remarkable as still presenting some fragments of an inscription, purporting to be a pastoral letter from Athanasius, patriarch of Alexandria, who died A.D. 371.^{*} The portion of the Psalms is now in the British Museum, and consists of about thirty leaves. The Coptic MS. contains one hundred and fifty pages, folded in the form now adopted by us, but has never been bound. It was in the collection of J. Burton, Esq., lately sold by Messrs. Sotheby and Son. Mr. Thorp, the bookseller, of Piccadilly, was the purchaser, at the sum of 84*l.*

These discoveries prove a very early knowledge of, and considerable proficiency in the art as now practised. When once the leaves were secured, the subsequent stages of covering and ornamenting would soon follow. Bruce describes the book he had as being covered with leather, and Suidas, who lived in the tenth century, and who would reason from personal knowledge of bindings of much earlier

* *Visit to Alexandria, &c.* ii. p. 312.

times, however erroneous his opinions on alchemy may have been, confirms the use of leather for the purpose of binding by the ancients. In his Lexicon, he describes chemistry as the art of making gold, and states that the *golden fleece*, in search of which Jason and the Argonauts went, was nothing else than a book *bound in sheep skin*, which taught the art of making gold.¹

The materials used and style of decoration adopted by the ancients for the embellishment of their rolls, has been described. All this knowledge would, when a more ample field for display, which the square form presented, arose, be brought into requisition, and considerably improved upon. In addition to the staining or colouring, it is but reasonable to suppose various ornaments would soon be added by people to whom many of the fine arts were so familiar. We have direct testimony of the adoption of impressed gold ornaments, and the Diptych, to which we shall now refer, proves that sculptured figures and other carved embellishment were very extensively introduced.

To enter fully into a description of the nature, form, and circumstances connected with the Diptych, cannot, from its great extent, here be effected. Gori has filled three folio volumes on the subject, and to his learned work we must be content to refer the curious in this matter. They have been classed under two descriptions, the profane and sacred. The former

¹ Edinb. Review, 1, 256.

will here engage our attention, reserving the latter to the next chapter, as coming properly under the period devoted to the consideration of the bindings, more immediately connected with monastic and religious institutions.

The name is from the *duplice*, or two-leaved *pugillaria*, consisting, like it, of two boards covered with wax, on which the characters were marked with the *stylus*. They were of similar character but different application ; the pugillaria being small, as before described, for private memorandums ; whilst the Diptych, of large dimensions, more especially appertained to the public acts of the consuls, magistrates, and other functionaries. They were generally composed of ebony or box-wood, connected together by two or more hinges. They were then embellished with carved ivory, and frequently with silver, gold, and precious stones, riveted very closely to the wood, and finished with the utmost elegance and taste. The names of the consuls, and the titles they respectively bore, generally in a contracted form, were inscribed upon them. The nature of the carving, &c., was much alike in design, though of varied execution. Of twelve described by Gori, very little difference exists, being full-length portraits of the consuls, and compartments exhibiting the peculiar games and amusements of the people. The description of one, which he designates the "DIPTYCHON LEODIENSE," will fully illustrate the nature of their extensive and elaborate ornament. Seated in the centre of each

board is a portrait of the consul, holding in one hand a baton, and in the other, upraised, a purse, as if in the act of throwing it to some victor in the games. Above are three miniature portraits, various other ornaments, and the inscription. Below, on one board, is a representation of a combat with wild beasts. On the other are two men, leading out horses for the race, and beneath them a group, with a ludicrous representation of two other men exhibiting the strength of their endurance of pain by allowing crabs to fasten on their noses. The frame-work and general detail are filled up with the best effect and proportion. The inscription on the first side is

FL ANASTASIVS PAVL PROVS
SAVINIANVS POMP ANAST

and on the second,

V INL COM DOMEST EQVIT
ET CONS ORD

This he pronounces to refer to *Anastasius*, “Consul Orientis,” A. D. 517, and his name and title, as *Anastasius Paulus Probus Sabianus Pompeius, vir illustris comes domesticorum equitum, et consul ordinarius.*”

The inscriptions on several are of a like character, but one, the “*Diptychon Bituricense*,” relates to the above *Anastasius*, the inscription being nearly the

* Gorii Thesaurus Vet. Diptychorum, i. 4.

same. This latter appears to have found its way into the royal library, Paris, as it is described by Dr. Dibdin, in his *Tour*,¹ as well as a letter inserted in it, written by a Mons. Mercier, on the subject of Diptychs, taken principally from Gori.

For the better understanding of this part of the subject, an illustration of one from the library of the Vatican is presented. It refers to the Consul Boethius, who flourished anno 487. Its character is seen in the engraving. A similar figure, seated, with the purse and upraised hand, is on the other side, which bears part of the inscription,

NARMANLBOKTHIVSVCTINL
EXPPPVSSECNSORDETPATRIC

and which Gori, in a lengthened description, interprets as referring to "*Manlius Boethius consul ordinarius et patricius.*"

Of this description of ornament did many of the side covers of books of former times consist, as we shall have occasion soon to speak, and there can be but little doubt that the Greeks and Romans were profuse in this addition to the beauty of their literary treasures. Montfaucon,² in his researches relative to ancient literature, confirms many of the facts that have been brought forward. He says, "the Greeks, after the custom of the present day, fastened together the leaves of their books, distributed into threes and

¹ Vol. ii. 147.—² *Palæogr. Græcæ*, 26.



Fac-simile of an Ivory Diptych, in the
Library of the Vatican, Rome.

fours, covered them with calf, or some other skin generally thicker. They strengthened the upper and lower part, where the book is more embellished, with a wooden tablet glued to the side in order that the leaves might adhere together more firmly." And Schwarz^x that the "books of the Romans, about the time of the Christian era, were covered at one time with red and yellow leather, at another time with green leather; at one time with purple, at another with silver, at another with gold."

The authorities cited, and existing specimens of ancient workmanship referred to in illustration of the subject, amply prove that the ancients were as profuse in the embellishment of their books, as they were careful in their preparation. They had also their large paper copies, and what may be called their hot-pressed compositions, still notable in our day, being twice polished with pumice.^y That the art must have arrived at a considerable degree of perfection, is further confirmed by the accounts of the number of volumes contained in their public libraries, and which of necessity would require the protection binding gives, to preserve them from injury. The earliest notice of a repository for records is the house of the rolls in Babylon, referred to in Ezra, vi. 2. In the celebrated Alexandrian library, consisting of seven hundred thousand volumes, and the one subsequently formed at Constantinople, of upwards of one hundred and

^x De Ornament. Lib. Vet. Disp. iii. 166.—^y Notes to Catullus, Ode xix.

twenty thousand, doubtless not only the common purpose of preservation would be attended to, but elegance and embellishment studied. Zonarus relates that among other treasures in the latter, there was a roll one hundred feet long, made of a dragon's gut or intestine, on which Homer's Iliad and Odyssey were written in letters of gold.¹ Of the splendour of the libraries of the Romans, it is reported that that of the younger Gordian, at Rome, was paved with marble, and ornamented with gold; that the walls were covered with glass and ivory, and that the armouries and desks were made of ebony and silver.²

Nor do books in the time of the ancients appear to have been so scarce as in periods nearer our own day they will be seen to have been; for in addition to their numerous public libraries, we find many notices of those of private individuals; as that of Lucullus, mentioned by Plutarch; of one at Tusculum named by Cicero; of that of Appellico the Teian, at Athens, which Sylla took to Rome; of that of the Pisos found at Herculaneum,³ and of numerous others containing large collections of books. The testimony of Seneca, Cicero, and Pliny, relative to the pleasure they derived from their libraries, also shows that books were comparatively plentiful. They were at that time an article of commerce. Catullus,⁴ in an Ode to Calvus, who had presented him with some

¹ Warton's Eng. Poetry, i. 104. —² Astle's Writing, introduction vii. —³ *Herculanensis*, 91. —⁴ Ode xiv.

despicable authors, promises him a return of others as worthless, in search of which he says

“ Let but the morn appear, I'll run
To ev'ry *book-stall* in the town.

Pollux speaks of booksellers' shops as being among the parts of sea-port towns.⁴ We also find mention of stands for the sale of books in such places;⁵ and Martial describes a bookseller's shop as having all the pillars or posts inscribed with the titles of the vendible books, the best being kept in the *upper nodus*, and the inferior in those below.⁶ That these *libraria*, or booksellers' shops, existed in almost every large city or town under the Roman sway, is abundantly confirmed by Horace,⁷ Pliny,⁸ Cicero,⁹ and others. This trade in books must have given employment to a great number of **BIBLIOPEGI** or **BOOKBINDERS**, who were also called *librorum concinnatores*, *compactores*, and who appear to have had under their direction the *glutinatores*, mentioned in Cicero's fourth epistle to Atticus.

Taking a review of this part of our subject, it may be pronounced in conclusion that a system of book-binding was known to the Greeks and Romans very little, if any, inferior to our own; that in elegance and finish, as in every other matter where taste was required, and in which they so much excelled, they would not be deficient; but that from the continued

⁴ Book vii. 33.—⁵ Dionisius of Halicarnassus, x. 5.—
⁶ Epigram l. 118.—⁷ Epist. i. 20.—⁸ ix Epist. 11.—
⁹ Philippic xi. 9.

wear to which the cover of a book is subject, and more particularly to the total destruction of all the Roman libraries by the successive irruptions of the Northern armies into the Western empire, and the sacking of Alexandria and Constantinople by the Saracens and Turks, no *perfect* remains of bookbinding as it was in their time, has come down to ours. The state and progress of the art, during another era, will be the object of our endeavours now to illustrate.

CHAPTER III.

MONASTIC AND OTHER BINDINGS UP TO THE INVENTION OF PRINTING.

FOR upwards of two thousand years it has been shown in the preceding chapter that the Art of Book-binding, by means of attaching the leaves to the back and affixing boards to the sides, has been practised, the addition of embellishment following in its train as a matter of taste, if not of necessity. Having, as we trust satisfactorily, established these facts, it will now be necessary to pass to the consideration of the subject as connected with the monastic institutions of Europe, when, from the annals of religious communities, and the appearance of bindings of the twelfth and thirteenth centuries, we shall not only be able to show what was the state of the art at that time ; but, reasoning from what we find it then to be, confirm what has been advanced as to the knowledge of it possessed by the ancients.

It will be first necessary to advert to the state of literature and scarcity of books in this and other

countries of Europe in early times, being partly illustrative of the progress of the art, connected as the making and binding of books will now be found to be. Before the invention of paper from linen, books were so scarce and dear, as to be beyond the reach of all but the rich, and it may reasonably be computed that the price of books was a hundred fold their present value. Though the materials of which they were made had been as cheap and as plentiful as paper is at present, the labour of multiplying copies in manuscript would always have kept them comparatively scanty. Hence learning was almost exclusively confined to people of rank. The papyrus was in most general use; but when the Saracens conquered Egypt in the seventh century it could no longer be procured. Parchment, the only substance for writing which then remained, was so difficult to be obtained that it was customary to erase the characters of antiquity, and Sophocles or Tacitus were obliged to resign the parchment to missals, homilies, and the Golden Legend.* In this manner many of the best works of antiquity were for ever lost, though some have in late times been recovered, from the imperfect manner the first writing was erased.^b History records many facts which place in a very striking light the scarcity and consequent value of books during the dark ages. Private persons seldom possessed any books at all, and even distinguished mo-

* Gibbon's *Rome*, v. 380.—^b *Edinb. Review*, xlvi. 353.

nasteries could in general boast of no more than a single missal. The collections which the ancients possessed did not in these times exist, for the libraries, particularly those of Italy, which abounded in innumerable and inestimable treasures of literature, were, as has been before referred to, every where destroyed by the precipitate rage and undistinguishing violence of the northern armies. Of the rarity of books, Warton, in the second Dissertation to his History of English Poetry, has given a long account. During this period the monasteries principally became the depositories of science. They were more tranquil than the rest of the world, and thither the arts fled for refuge ; artists became monks and monks became artists, the manuscripts and illuminations executed by them, which are still preserved to us, attest their dexterity and skill in designing and executing the most beautiful and complex subjects.^c And it is evident from various accounts left us, that the religious were not only the writers and illuminators, but also the binders of books in the times of the Saxons, which they continued to practise up to the invention of printing. The monks and students in monasteries were the principal labourers in this business, and it was part of the sacrist's duty to bind and clasp the books used for the service of the church.^d A book, usually known by the name of *Textus Sanctus Cuthberti*, preserved in the Cottonian Library (Nero, D. IV.) is a fine specimen of

^c Specimens of Ancient Sculpture, ii. ——^d Warton, ii. 244.

Saxon caligraphy and decoration of the seventh century. It was written by Eadfrid, bishop of Durham, and Ethelwold, his successor, executed the illuminations, the capitals, and other illustrations, with infinite labour and elegance. Bilfrid, a monk of Durham, covered the book, and adorned it with gold and silver plates set with precious stones. These particulars are related by Aldred, the Saxon glossator, at the end of St. John's gospel. Simon, of Durham, or Turgot, tells us that the cover of it was ornamented "forensecis geminis et auro." Many curious tales are related concerning this book; amongst others, Turgot gravely asserts, that when the monks of Lindisfarn were removing from thence, to avoid the depredations of the Danes, the vessel wherein they were embarked oversetting, this book, which they were transporting with them, fell into the sea. Through the merits of St. Cuthbert, the sea ebbing much further than usual, it was found upon the sands, above three miles from the shore, without having received injury from the water.* The original binding has been replaced by a russia covering, having been, most likely, despoiled of its ornaments at the period of the reformation. We find also that Dagæus, a monk who flourished in Ireland in the early part of the sixth century, was a skilful caligraphist, and manufactured and ornamented binding, in gold, silver, and precious stones. He died A.D. 587. Ethelwolf, in a metri-

* Astle's Writing, 101.

cal epistle to Egbert, at that time resident in Ireland, with a view of collecting MSS. extols one Ultan, an Irish monk, for his talents in adorning books.^f Herman, one of the Norman bishops of Salisbury, about the year 1080, not only wrote and illuminated books, but also bound them.^g Some of the classics were early written and bound in the English monasteries. Henry, a Benedictine monk of Hyde abbey, near Winchester, transcribed, in the year 1178, Terence, Boetius, Suetonius, and Claudian, which he bound in one book, and formed the brazen bosses of the covers with his own hands.^h

For the purposes above enumerated every great abbey appropriated a room, which was called the **SCRIPTORIUM**. Here several persons were constantly employed in transcribing not only the service books for the choir, but books for the library; and binding them. Ingulphus, of the abbey of Croyland, speaking of the lending of books, says "Our books, as well the smaller unbound volumes, as the larger ones which are bound, we altogether forbid."ⁱ The custom of making this one good use of convents and of Christian societies, was derived from very early times. About the year 220 Alexander, bishop of Jerusalem, built there a library for the preservation of the epistles of the learned. And Origen was assisted in the production of his works by several notaries, who

^f O'Conor's *Rerum Hibernicarum*, clxxvii. —^g Mon. Angl. iii. 275. —^h Warton, i. cxliv. dis. 2. —ⁱ Ing. ap. Galc, 104.

wrote down in turn that which he uttered.^k For the support of the Scriptorium, estates were often granted. That at St. Edmondsbury was endowed with two mills. The tithes of a rectory were appropriated to the cathedral convent of St. Swithin, at Winchester, in the year 1171. Many other instances of this species of transaction occur. About the year 790, Charlemagne granted an unlimited right of hunting to the abbot and monks of Sithin, for making their gloves and girdles of the skins of the deer they killed, and *covers for their books*. Nigel, in the year 1160, gave the monks of Ely two churches, *ad libros faciendos*. R. de Faston granted to Bromholm abbey, in Norfolk, 12d. per annum, a rent charge on his lands, to keep their books in repair. These employments appear to have been diligently practised at Croyland, for Ingulphus relates that when the abbey was burnt in the year 1091, seven hundred volumes were consumed. Large sums were disbursed for grails, legends, and other service-books for the choir of the chapel of Winchester college, as is shown by a roll of John Morys, the warden, an.xx. Richard II.A.D.1397. It appears, in this case, that they bought the parchment, and hired persons to do the business of writing, illuminating, noting, and binding, within the walls of the college. The books were covered with deer-skin. As Item in vj pellibus *cervinis* emptis pro libris predictis cooperiendis. xijs. iiijd. The monks, as has been before remarked, were skilful illuminators.

^k Eccl. Hist. of Eusebius Pamphilus, book vi. c. 20.

They were also *taught to bind books*. In the year 1277, these constitutions were given to the Benedictine monasteries of the province of Canterbury : “*Abbates monachos suos claustrales, loco operis manu-alis, secundem suam habilitatem cæteris occupationi-bus deputent : in studendo, libros scribendo, corri-gendo, illuminando, ligando.*” That the students and monks were the binders of books, is further confirmed by a note in the first page of a manuscript Life of Concubramis. “*Ex CONJUNCTIONE (ligatura) dompui Wyllelmi Edys monasterii B. Mariæ S. Mod-wenæ virginis de Burton super Trent monachi, dum esset studens Oxoniæ, A. D. 1517.*¹ Haymo de Hethe, in the original endowment of Chalk, in Kent, in 1327, compelled the vicars to be at the expense of binding their missals, “*libros etiam ligari faciet.*”²

The multiplying of books, with their bindings and decorations, were almost solely confined to the religious houses in the early ages of christianity, and that it continued to be so until the invention of printing there is abundant proof. In one of John of Trittenheim’s (abbot of Spanheim) exhortations, in the year 1486, after many injunctions against idleness, he observes that he has “ diminished their labour out of the monastery, lest by working badly you should only add to your sins, and have enjoined on you the manual labour of writing and *binding books.*” And again, urging them to the duty, he says—“ It is true

¹ Warton, i. cxlvii. dis. 2.—² Archæologia, xi. 362.

that the industry of the printing art, lately, in our day, discovered at Mentz, produces many volumes every day; but it is impossible for us, depressed as we are by poverty, to buy them all."^a From their scarcity, they were more curious of their books than we are. They therefore were extremely anxious for their preservation, but unfortunately that which appeared likely to protect them for ages, often proved their destruction. The side covers were formed of wood, which tended to facilitate the ravages of the worm, and when not of a good quality the edges soon got damaged, and the books suffered considerably. These wooden covers doubtless were at first perfectly smooth and unadorned, but as the contents of the work would frequently be of importance, it may reasonably be supposed that, like the people of still earlier times, the owners would decorate the exterior according to the extent of their esteem for the book. Hence originated the art of embellishment upon the side covers.

The earliest specimens of the external decoration of books that have been preserved to our day, is doubtless those of the DIPTYCH, one class of which have been described. We shall now refer to those of a sacred character, or such as were connected with the affairs and administration of the early churches. They were in every respect, except the ornament, like those referred to at page 36. This ornament consisted of carved illustrations of passages in the lives of the

^a Br. Mag. x. 128.

Saviour, the Virgin, the Apostles, and the saints of the Romish church; some of them bearing in compartments as many as twenty-two subjects. Gori has devoted the whole of his third volume to them. The earliest specimens are of rude workmanship, but as the church progressed in prosperity, the same elegance of finish we have had occasion before to remark, is found upon these. One subject of frequent occurrence, is the Saviour, seated in the act of teaching as here represented.



This occupies the centre of the board; the corners are variously filled up with the four evangelists, their emblems, or subjects of religious import.

The Royal Library at Munich contains the finest specimens of this description of book ornament in the world. The British Museum exhibits very few, and those not of a splendid character. The late Mr. Douce possessed a number of diptychs, the particulars of which have been given by Sir S. R. Meyrick, to whom they were bequeathed.* One of them, of the time of Edward the First, he says, is in ivory, and when open, measures eleven inches and three quarters long, and eleven wide. In front of the subjects, which are in alto-relievo, are twelve trefoiled arches within pointed ones, arranged in two tiers, the upper row having pediments with crockets and finials. The first subject is the Annunciation; then the interview between Mary and Elizabeth. Next the angels appearing to the shepherds to tell them of the birth of Christ. One of these last is beating a tabor with a drumstick, and another playing on the bagpipes. In front of them are Joseph, the Virgin, and Child. Then three kings on horseback, their bridles made half their length of chain, and three on foot, come into the presence of one sitting on his throne (probably Herod), attended by his mace-bearer, announce their intention of taking the presents they bear to the infant Jesus. Next, the Virgin appears seated

* *Gent.'s Mag. new series, v. 585.*

on a Gothic chair, being crowned by a descending angel, bearing the child on her lap, before whom appear three of the kings with their presents, one kneeling and taking off his crown with one hand, as he makes the offering with the other. Lastly, Herod's cruelty, the soldiers wearing the cervelliere over the capuchon of mail, and surcoats. On the outside it is ornamented with foliage.

The acts of the religious rulers, like those of the consuls, gifts to the church, &c. were noted in these diptychs.^p Montfaucon states the names of the bishops were carefully registered, or erased, according to the purity or immorality of their lives.^q

The ornament seen on the diptych soon became common on the choice *books* of the church, and the plain wooden cover was adorned with all the ingenuity that wealth and taste could bestow. The libraries on the continent are much richer in gems of this description than our own country, and some specimens have been described by Dr. Dibdin^r with great minuteness. St. Jerom, who flourished in the fourth century, refers to the splendour of many books in his time.^s A book of the Gospels, translated by Ulphilas, bishop of Moesia, A. D. 370, was called the "Silver Book of Ulphilas," because bound in massy silver.^t Another copy presented by the emperor Justin to pope Hormisda, between the years 518 and 523, was

^p Gor. Thesaurus Vct. Dipt. i. 2.—^q Palaeog. Græca, 34.
—^r Bibliographical Tour, iii. 262 and 460.—^s Astle's
Writing, 196.—^t Ibid. 87.

bound in plates of gold and enriched with precious stones, to the weight of fifteen pounds. Leo III., who was raised to the pontificate in 795, gave to various churches copies of the Gospels, alike splendidly ornamented. The abbot Angilbert, on the restoration of the abbey of St. Riquier, A. D. 814, presented to it a copy of the Gospels, in silver plates, "marvelously adorned with gold and precious stones." Another copy, written in letters of gold and silver, and bound in gold, enriched with gems, was presented to his church by Hincmar, on becoming archbishop of Rheims in 845. The emperor Michael, about the year 855, sent as a present to St. Peter's, a Gospel of most pure gold, with divers precious stones. Everhard, count of Friuli, bequeathed by will, A. D. 861, to his children, his Bible, and a number of other books, among which a Gospel bound in gold, another in silver, and another in ivory. In 1022, the emperor Henry II., on recovering from illness, at the monastery of Monte Casino, presented to it a copy of the Gospels, covered on one side with most pure gold, and most precious gems. Returning the same year into Germany, he had an interview with Robert, king of France, but of all the rich presents offered by that king, the emperor accepted only a copy of the Gospels, bound in gold and precious stones. Desiderius, who became abbot of the above monastery in 1058, provided it with many costly books; and the empress Agnes made many rich gifts to the church, and among the rest, a copy of the Gospels, with one

side of cast silver, with chased or embossed work, very beautifully gilt."

These specimens will suffice to give an idea of the labour and expense expended on the external decoration of books at a very early period of the history of Europe. But to return more particularly to the productions of the monks and religious of our own country, we shall find that in their progress they did not lose their ancient reputation. We have before described the book of St. Cuthbert, and other works. The next earliest is a Latin Psalter considered to be the oldest extant in England, and thus described by Moule.⁴ "The original book upon which all our kings, from Henry I. to Edward VI., took the coronation oath, is now in the library of a gentleman in Norfolk. It is a MS. of the four Evangelists, written on vellum, the form and beauty of the letters nearly approaching to Roman capitals. It appears to have been written and bound for the coronation of Henry I. The original binding, which is still in a perfect state, consists of two oaken boards, nearly an inch thick, fastened together with stout thongs of leather, and the corners defended with large bosses of brass. On the right-hand side, as the book is opened, of the outer cover is a crucifix of brass, double gilt, which was kissed by the kings upon their inauguration; and the whole is fastened together by a strong clasp of brass, fixed to a broad piece of leather secured with

⁴ Papers on the Dark Ages, No. xiii.—Br. Mag. ix. 219.—
⁵ Bibliotheca Heraldica, 493.

two brass pins." This book is now in the library of the Duke of Buckingham at Stowe. It was formerly entered in the Exchequer as a little book with a crucifix. The crucifix is about six or eight inches in height, and the workmanship rather clumsy. A drawing of it by Vertue, is in the collection of the Society of Antiquaries.* Another MS. Gospel, partly Latin and partly Saxon, in the British Museum (Cotton MSS. Titus D. xxvii.) is also bound with oaken boards, one being inlaid with pieces of carved ivory, which is supposed to have been executed at a later period, probably from the piety of some subsequent owner. They are however very curious and deserving of explicit notice. The first consists of our Saviour, with an angel above him: the second of the Virgin with Christ in her lap—the Virgin is in half length: the third is a small whole length of Joseph with an angel above. A gilt *nimbus* is round the head of each, but that which encircles the Virgin is perfect; and the compartment in which she appears (about 5 inches high) is twice the size of each of the others. The draperies throughout are good. It is altogether a choice specimen of ancient binding.^x This mode of external ornament is further illustrated by the following description of two books by Mr. Astle, in a paper on crosses and crucifixes. "A booke of Gospelles garnished and wrought with antique worke of silver and gilte with an image of the crucifix, with Mary and John, poiz together

* Dibdin's Bib. Decani. ii. 434.—^x Ibid.

cccxxij. oz." In the Jewel House in the Tower "a booke of gold enameled, clasped with a rubie, having on th' one syde a crosse of dyamounts, and vj. other dyamounts, and th' other side a flower de luce of dyamounts, and iiiij. rubies with a pendante of white sapphires, and the armes of Englande. Which booke is garnished with small emeraldes and rubies hanging to a chayne pillar fashion set with xv knottes, everie one conteyning iij. rubies (one lacking)."¹

It was also usual in early times to engrave the arms of the owner on the clasps which were generally attached to books. Eleanor, duchess of Gloucester, mentions in her will, in 1339, "a Chronicle of France," in French, with two clasps of silver, enamelled with the arms of the Duke of Burgoyne; a book containing the Psalter, Primer, and other devotions, with two clasps of gold enamelled with her arms; a French Bible in two volumes, with two gold clasps enamelled with the arms of France; and a Psalter richly illuminated, with the clasps of gold enamelled with white swans, and the arms of my lord and father enamelled on the clasps.² Among the books in the inventory of the effects of Sir John Fastolfe, were two "Mys-sayles closyd with sylver," and a "Sauter claspyd with sylver, and my maysters is arnys and my ladyes ther uppon."³

The Bedford Missal is, perhaps, as splendid a specimen of the taste and ingenuity of the monks, as any

¹ *Archæologia* xiii. 220. — ² Nicolas' *Test. Vetusta*, i. 148.
— ³ *Archæol.* xxi. 276.

extant. It contains fifty-nine large miniatures, occupying nearly the whole page, and above a thousand small ones, in circles of about an inch in diameter, displayed in elegant borders of golden foliage, with variegated flowers, &c. Among the portraits are whole-length ones of John, duke of Bedford, regent of France in the reign of Henry VI., and of his duchess. The volume measures eleven inches by seven and a half in width, and two inches and a half in thickness. It is bound in crimson velvet with gold clasps, whereon are engraved the arms of Harley, Cavendish, and Hollis quarterly. The duke of Bedford presented it to his nephew Henry VI.^b It was bought of the Somerset family, by Harley, second earl of Oxford; from whom it came to the late duchess of Portland, at whose sale Mr. Edwards became the owner for 215 guineas. It was sold again in 1815 to the marquis of Blandford for 687*l.* 15*s.* Sir John Tobin is now the possessor.

These may be pronounced as fair general specimens of the talent of the ancient European Bookbinders, time, damp, the worm, and religious zeal, having worked the destruction of the coverings of nearly all the early manuscripts; though to the latter must be attributed not only the scarcity of proof of what the bindings of these talented monks and artists were, but the entire loss of the books also. The mistaken zeal, enthusiasm, and bigotry of the early leaders of

^b Horne's Bibliography, i. 302, and Nichol's Illust. vi. 296.

the reformation, or of those they employed, swept away without distinction the works of the learned with the books of devotion preserved in the religious houses, and deprived the world doubtless of many treasures now unknown. With these the bindings were of course destroyed, and even in cases where the book may have been preserved, the cupidity of many to whom the task of visiting the religious establishments was assigned, would lead them to divest them of the valuable ornaments with which we have shown many were enriched and decorated. Not only were the libraries completely sacked, but the huge volumes which contained the ancient services, and abounded in all the churches and monasteries, were destroyed without mercy, ardently and enthusiastically. Many of these had been brought direct from Rome, where a great manufactory of such works had for some centuries existed. An immense volume was laid upon the *lutrin*, or reading-desk, in the middle of the choir, and the letters and musical notes, which accompanied the words, were of such an enormous magnitude, and so black, that they could be read by the canons, as they sat in their stalls, at as great a distance, and with as much ease, as an inscription on a monument. These ponderous volumes lay unmolested on the desk, or at the utmost were only carried to the adjoining sacristy, and were a part of the furniture, and almost of the fixtures, of the churches; they were exempt from injury and accident, and were frequently therefore of great antiquity, having been constructed in

very remote times, when manuscripts of value were plentiful.^c They were garnished with corners of brass, with bosses, and brass nails, to preserve the bindings from injury in being rubbed on the desk or pulpit, and protected from dust by massive clasps. Some, when very large, were, for further protection, laid upon rollers. The nature and extent of these additions are shown in an illumination of a MS. of the fifteenth century, in the Royal Library, Paris, from which the following is taken.



The accumulation, though slowly, had, in a great number of years, led to the formation of many considerable libraries in the houses of the religious at the period of the reformation.^d Of the extent of the devastation and frightful havoc then committed a writer of the time gives an account. Speaking of the destruction of books, he indignantly says, "Never had we been offended for the loss of our libraries, being so many in number, and in so desolate places for the more part, if the chief monuments and most notable works of our most excellent witors had been

^c Edinb. Review, xlvi. 96. —^d Leland's Collectanea, i. 109.

preserved. If there had been in every shire of England but one *solempne* library, to the preservation of those noble works, and preferment of good learning in our posterity, it had been yet somewhat. But to destroy all without consideration, is, and will be, unto England for ever, a most horrible infamy among the grave seniors of other nations. A great number of them which purchased those superstitious mansions, reserved of those library-books, some to serve the jakes, some to scour their candlesticks, and some to rub their boots; some they sold to the grocers and soap-sellers; some they sent over sea to the *bookbinders*, not in small numbers but at times whole ships full, to the wondering of the foreign nations. Yea, the universities of this realm are not all clear of this detestable fact. But cursed is that belly which seeketh to be fed with such ungodly gains, and shameth his natural country. I know a merchant man, which shall at this time be nameless, that bought the contents of *two noble libraries* for *forty shillings* price; a shame it is to be spoken. This stuff hath he occupied in the stead of grey paper, by the space of more than ten years, and yet he hath store enough for as many years to come!"*

With these facts before us it need not be matter of surprise how few specimens of bookbinding, prior to the introduction of printing, now exist. Previous extracts have shown the early adoption of wooden boards as

* Pale's Preface to Leland's Journey, 1549.

side covers, for books, by the monastic binders. Every means were used for their preservation, hence strength and durability were most studied. They sewed them on pieces of skin or parchment; and even carried their precaution so far as to protect each sheet externally and internally with a slip of parchment, to prevent the thread, with which the book was sewn, from cutting the paper, and to protect the back from injury. When the boards were first covered, it appears that a common parchment or vellum, made from the skin of the deer, was used. Richard Chandos, bishop of Chichester, mentions in his will, so early as the year 1253, a "Bible, with a rough cover of skin," and bequeaths it to William de Selsey.^f Another proof of the adoption of this covering occurs in the "Accounts of the Household of Edward I. and II.," contained in four MS. volumes presented to the Society of Antiquaries, by Sir Ashton Lever; which were in the original binding of calf-skin, dressed like parchment with the hair on, and razures of the hair made for writing the inscription.^g Elizabeth de Burgh, in the year 1355, by will left "to my hall, called Clare Hall, Cambridge," among other books, one missal, covered with white leather or hide, and one good Bible covered with black leather.^h More expensive ornament followed, as has been shown. Velvet was long the material used for the *covers* of

^f Nicolas Testamenta Vetusta, ii. 762.—^g Archaeologix, vii. 418-19.—^h Nicolas, i. 58.

the best works. The Bible, when first translated into Latin, was divided into four or six parts. In the will of Richard (Sanctus), bishop of Chichester, he bequeathed to the four orders of friars, each one part, (1258) "glossatam," which means with marginal notes. In the next century the Bible was translated into French, illuminated, with a commentary, and bound in two volumes covered with velvet, with clasps of gold, enamelled with the arms of the prince or nobleman at whose expense the MS. was made. Psalters were more common. Missals, as has been before remarked, were so splendid as to have miniatures in every page, and were wrought with jewels on the covers of the velvet.¹ The wills of the nobles and rich of this country, in times when it was the custom to leave books as legacies to friends and ecclesiastical bodies, however, furnish the best evidence of the use of velvet as a cover for books in very early times. In the will of Lady Fitzhugh, A.D. 1427, several books, &c., are thus bequeathed :—" Als so I wyl yat my son William have a Ryng with a dyamond and my son Geffray a gretter, and my son Rob't a sauter covered with rede velwet, and my doghter Mariory a primer cou'ed in Rede, and my doghter Darcy a sauter cou'ed in blew, and my doghter Malde Eure a prim' cou'd in blew."² Eleanor, countess of Arundel, left by will to Ann, wife of her nephew,

¹ Nicolas, i. xxvii. Notes.—² Wills and Inventories, part i. Surtees Society, and Nicolas, i. 213.

Maurice Berkeley, a book of Matins covered with velvet. This was in the year 1455; and in 1480, a similar bequest was made to her daughter, by Ann, duchess of Buckingham, of a primer covered with purple velvet, with clasps of silver gilt.¹

These records prove velvet to have been used as a cover for books long before the time usually assigned to it, and shows that every variety of colour was adopted according to the subject matter of the contents of the volume. This was particularly the case a century or two earlier, for among the courtesies of love in chivalric times, the present of books from knights to ladies was not forgotten, and it more often happened than monkish austerity approved of, that a volume *bound in sacred guise*, contained not a series of hymns to the Virgin, but a variety of amatory effusions to a terrestrial mistress.²

The will of Walter, lord Hungerford, proves the use also of coloured cloths for binding at an early period. He bequeathed in 1449, to Lady Margaret, wife of Sir Robert Hungerford his son, "my best Legend of the lives of the saints in French, and covered with red cloth."

The art of bookbinding, it is seen, both as respects style, and variety of material for the covers, was far advanced at the period that witnessed the invention of printing. The details of its history for a century after that event, may be pronounced the history,

¹Nicolas, i. 279, 357. ——² Mill's History of Chivalry, i. 42
—— " Nicolas, i. 258.

making allowance for the improvements the greater number of books and consequent field for exertion would produce, of at least a like period before. We proceed to trace it under new circumstances, attested by numerous records and notices of writers of days gone by,—illustrated and corroborated by specimens of bindings that have withstood the havoc of time.

CHAPTER IV.

**ENGLISH BINDING AND BINDERS, FROM THE INVENTION
OF PRINTING TO THE EIGHTEENTH CENTURY, MORE
PARTICULARLY AS RELATED TO MATERIALS AND FINISH.**

THE multiplication of manuscripts, which the introduction of paper, made from linen, into Europe, occasioned, caused a considerable reduction in their price, and contributed essentially to the diffusion of knowledge. Learning had already begun to revive, and to be cultivated with considerable ardour, when the invention of printing by John Gutenburgh, of Mayence, or Mentz, about the year 1438, gave a new stimulus to the human mind, and formed the most important era to the history of literature and civilization.* It drew forth learning from libraries and convents, and, by increasing the number of books, placed them within the reach of all. The avenues of science were thus thrown open to every one, and volumes of information which had before existed in costly manuscripts, were now in every hand. No retrogression

* Gibbon.

in knowledge or the arts, could ever more take place, recorded as it now became in a thousand ways, spreading abroad the intelligence, improvements, and inventions of the more skilful, and making them alike the common property of the whole community.

What printing became to the other arts, binding now, in an especial manner, became to the productions of the press. And, that the practisers of the art were fully sensible of this is shown by the firm way the bindings of early printed books, which are still preserved, are executed. And to this care we may attribute the existence of so many specimens of early typography, for if the slight and careless manner, in which some bindings of a later date have been executed, had at that time been common, it is but reasonable to suppose, that we should also have to regret the loss of many of those specimens we now possess.

The art of printing was introduced into England by William Caxton in 1473, and his press fully established in Westminster Abbey in 1477.^b The early English printers, however, did not make much progress, for it appears that an act was passed in the year 1483, authorizing "strangers repairing unto this realm to bring printed and written books, to sell at their pleasure." Books were at first printed either in large or small folio, or at least quartos; the smaller sizes were not in use till some time after the inven-

^bAme's Typograph. Antiq. i 3.

tion of printing, if at all, certainly but rarely previous to A. D. 1480.^c At this time too, and long after, every process belonging to a printed book, from the punch to the *binding*, was included under the general denomination of *printing*.^d Of the early English *bookbinders*, consequently, very little is known, and that only from their connection with the printing branch of the profession. Thus we find that Wynkyn de Worde, the successor of Caxton, left by will, legacies, to Nowel, the *bookbinder* in Shoe Lane, and to Alard, bookbinder, his servant.^e This Nowel, doubtless, was what is now called a *chamber binder*,—that is, doing work for the bookseller and printer, and perhaps at that time wholly employed by Wynkyn de Worde. John Reynes, at the George, in St. Paul's Church-Yard, about the year 1527, was an eminent publisher and *binder*.^f To these, in further confirmation, may be added, Michael Lobleyn and William Hill,^g living in St. Paul's Church-Yard, 1531—1536, as also "Toye, the bookbinder," named as engaged in search for the printers of a work against the government of the church, about 1550.^h

Of the progressive improvement in bookbinding and the materials with which the books were covered, the public libraries of Europe, and especially, as will be seen in another chapter, the royal library at Paris, exhibit many specimens. Manuscript books,

^c Horne's Int. to Bibliography, i. 291.—^d Hansard's Typographia, 334.—^e Ame's Typographica Antiquities, i. 120.—^f Ibid. i. 413.—^g Ibid. ii. 756.—^h Ibid. i. 560.

and those printed many years after the invention of printing, were variously decorated in binding. David Casley, deputy librarian to George II., speaking on the subject, says, “ The very covers of a great many MSS. are curiosities, there having been different ways of binding books in different ages: and some have happened to have been bound with so good material as to have lasted a great while, which may be proved by several books which, upon examination appear to have been but once bound.”¹

The common cover for early printed works doubtless remained, as for MSS. in monastic times, a kind of parchment or forrel. But for the books of the noble and rich, as has been shown, a considerable degree of elegance had been adopted. Velvet was the most usual, and in this degree of luxury the poorer classes of readers now also indulged. Chaucer, in describing the “ Clerke of Oxenforde,” says—

“ *For hym was leuer to habe at hys beddes heud
Twenty bookez cladde wþ blacke or reed.*”²

And in “ An inventory of English Books, of John Paston, made the 5th day of November, in the —— year of the reign of Edward IV.” we find particularized :

Item—A *black* book with the Legend of . . . Lady sans Merci.

Item—A *red* book, that Percival Robsart gave me of the Meeds of the Mass.¹

¹ Casley’s Preface to Cat. of Royal Library, xv.—² Prologue to Canterbury Tales, edition 1642. — ¹ Burnett’s Specimens of English Prose Writers, i. 157.

It is, however, in the notices left of the above monarch that we shall find the most ample record of the early use of velvet and silk in the bindings of books. In his Wardrobe Accounts, A.D. 1480, kept by Piers Courtnays,[■] we have many particulars of the cost of bindings, materials used, &c. “ To Alice Claver for the making of xvij laces and xvij tasshels for the garnysshing of divers of the Kinges booke, ij s. viij d.; and to Robert Boillett for blac papir and nailles for closyng and fastenyng of divers cofyns of fyrr wherein the Kinges books were conveyed and caried from the Kinges grete Wardrobe in London unto Eltham aforesaid v d.; Piers Bauduyn stacioner for bynding, gilding, and dressing of a booke called Titus Livius xx s.; for binding, gilding, and dressing of a booke of the Holy Trinite xvij s.; for binding, gilding, and dressing of a booke called Frossard xvij s.; for binding, gilding, and dressing of a booke called the Bible xvij s.; for binding, gilding, and dressing of a booke called Le Gouvernement of Kinges and Princes xvij s.; for binding and dressing of thre smalle books of Franche price in grete vj s. viij d.; for the dressing of two bookes whereof oon is called La Forteresse de Foy, and the other called the Book of Josephus iij s. iiij d.; and for binding, gilding, and dressing of a booke called the Bible Historial xx s.”

For the binding of these books another entry is made of the materials used; from which it appears

[■] Edited by Sir H. N. Nicolas, 125.-6.

that, as in the case of apparel, &c., worn by our kings and nobles, they procured the materials and employed workmen to execute the article wanted. “ Delyvered for the coveryng and garnysshing vj of the Bookes of oure saide Lorde the Kynges, that is to say, oon of the Holy Trinite, oon of Titus Lyvius, oon of the Gouvernal of Kynges and Princes, a Bible, a Bible Historialle, and the vj^{thc} called Frossard. Velvet, vj yerdes cremysy figured; corse of silk, ij yerdes di’ and a naille blue silk weying an unce iij q’ di’; iiiij yerdes di’ di’ quarter blac silk weying iij unces; laces and tassels of silk, xvij laces; xvij tassels, weying to gider vj unces and iij q’; botons, xvij of blie silk and gold; clasps of coper and gilt, iij paire smalle with roses upon them; a paire myddelle, ij paire grete with the Kynges Armes upon them; bolions coper and gilt, lxx; nailes gilt, ccc.”*

And again, “ To Alice Claver sylkwoman for an unce of sowing silk xiv d.;” for “ ij yerds di’ and a naille corse of blue silk, weying an unce iij quarters di’ price the unce ij s viij d. v s.; for iiiij yerds di’ of quarter corse of blac silk weying iij unces price the unce ij s iiiij d. viij s.; for vj unces and iij quarters of silk to the laces and tassels for garnysshing of diverse Books price the unce xiiij d. viij s. x d. ob.; for the making of xvij laces and xvij tassels made of the said vj unces and iij quarters of silke price in grete

* Wardrobe Accounts, &c. 152.

ij s viijd. and for xvj botons of blue silk and gold price
in grete iiii s."

" For the copersmythe for iij paire of claspes of
tooper and gilt with roses uppon them price of every
paire iij s. for two paire of claspses of coper and gilt with
the Kings Armes upon them price the pair v s. and
for lxx bolyons of coper and gilt xlvj s. viij d."[•]

The "velvet cremysyn figured with white," cost
the king viij s per yard.[•] The *bolions* named were a
smaller sort of button used as fastenings of books, &c.
—made of copper and gilt, and cost about eighteen-
pence each.[•] At this time the wages of various work-
men were from fourpence to sixpence a day.[•]

By the above account it is evident that the books
belonging to the king's library were adorned with all
the splendour the best materials, and state of the
art could give to their exteriors. Successive mon-
archs of this country were not less interested in
the appearance of their libraries, and velvet con-
tinued for some time to be a favourite and the prin-
cipal cover for at least such works as were consi-
dered valuable. In the Privy Purse expenses of Henry
VIII.[•] we find the following entries from the year
1530 to 1532. " Paied to Westby clerk of king's
closet for vj masse books. And for vellute for to cov'
them iij l. xj s. To Rasmus one of the Armerars for

• Wardrobe Accounts, 117, 119.—[•] Wardrobe Accts. Edward
IV. 116.—[•] Notes to do. by Nicolas —[•] Nicolas's Remarks
on do. ii.—[•] Edited by Nicolas, 8vo. Pickering.

garnisshing of boks and div's necessaryes for the same by the king's commaundment, xij l. v s. vij d. To Peter Scryvener for bying vellum and other stuf for the king's books, iiiij l. To the boke-bynder, for bringing of boks fro hamptonco'te to yorke place, iiiij s. viij. d. To Asmus the armerer, for the garnisshing of iiiij-xx. vj. boks as apperith by his bille. xxxiiij l. x s. And paied for sending of certeyne boks to the king's bokebynder, ij s.

And in an Inventory of the same monarch's Guarde-robe, &c. made by virtue of a commission under the great seal of England, dated at Westminster, September the 14th, 1547,¹ the following notices occur :—“A Massebooke covered with black velvet, a lytle booke of parchement with prayers covered with crymsen velvet. Also in one deske xxxij bookes covered with redde; and in another deske, xvij bookes covered with redde.”

The privy purse expenses of Henry's daughter,² afterwards Queen Mary, also furnish us with further evidence :—In January 1542—3, “was paied to the boke bynder for a boke lymmed w^t golde, the same geuen to the p'nce g'ce for a newyer' gifte, xxix s. In the following year, to my ladie Herbert, a boke cou'ed w^t silv' and gylt, viij s. vj d.; and in 1537, was paid for a claspe for a boke, vj s.”

These accounts prove that a degree of splendour was lavished on the exterior coating of books almost

¹ MSS. British Museum, No. 1419. A and B.—² Edited by F. Madden, Esq. F.S.A. 8vo. Pickering.

unknown to our day ; for without the cost of what is properly the *binding*, it is seen that Rasmus, or Asmus, who doubtless was the same person, is paid on one occasion, for garnishing of divers books, eleven pounds, five shillings, and seven pence ; and on another no less than thirty-four pounds, ten shillings, for garnishing eighty-six books, about eight shillings each for the mere embellishment alone of them, which we take to mean fixing the clasps, bosses, &c. to the sides. The splendour of some of these early bindings may be gathered from the poet laureat^{*} of this period, who, speaking of a book, and enraptured with the appearance of it, breaks out in verse :—

“ With that of the boke lozende were the claspes,
The margin was illumined al with golden raileda,
And bice empictured with grass-oppes and waspes,
With butterfylies, and fresh pecocke tailes,
Engloyed with flowres, and slymy snayles,
Envyyved pictures well touched and quickly,
It would have made a man hole that had be right sickly,
To behold how it was garnished and bound,
Encoverde over with golde and tissue fine,
The claspes and bullions were worth a M pounde,
With balassis and carbuncles the border did shine,
With *aurum mosaicum* every other line,” &c.

To return, however, it appears also from the extracts before quoted, that there was then such a servant of the court as the KING'S BOOKBINDER. They go far too to clear the eighth Harry from the charge of knowing nothing of, and caring less for fine books. That his predecessor Henry VII. col-

* Skelton 46.

lected a magnificent library, the various splendid specimens that still exist, bearing his arms on the bindings, is full evidence ; but there can be no doubt it was considerably augmented by his son, under the skilful direction of the great antiquary, Leland, whom Henry had appointed his librarian, and who, in his visit to the various monasteries, must have become possessed of many rare manuscripts and fine books. This is borne out by Heutzner, a German traveller, who, describing the royal library of the kings of England, originally in the old palace at Westminster, but now in the British Museum, which he saw at Whitehall in 1598, says, that it was well furnished with Greek, Latin, Italian, and French books, all *bound in velvet*, of different colours, yet chiefly red, with clasps of gold and silver : and that the covers of some of them were adorned with pearls and precious stones.*

Among those originally belonging to Henry VII. is a very curious book of Indentures in the British Museum. It is dated July 10, in the nineteenth year of his reign, and made between him and the abbot and convent of St. Peter's, Westminster, for the celebration of certain masses, &c. to be performed in Henry VII.'s chapel, then intended to be built. It is indeed a most noble and curious book, the cover is of crimson Genoese velvet, edged with crimson silk and gold thread, and with tassels of the

* Warton's Eng. Poetry, iii. 272.

same material at each corner. The inside is lined with crimson damask. On each side of the cover are five bosses, made of silver, wrought and gilt; those in the middle have the arms and supporters of Henry VII., with his crown and supporters of silver, gilt and enamelled; in the others, at each corner, are so many portcullises, also gilt and enamelled. It is fastened by two hasps, made of silver, and splendidly enamelled with the red rose of the house of Lancaster. The counterpart of these indentures, bound and decorated in all respects like the original, is preserved in the Record Office in the Chapter House, at Westminster.*

In the British Museum, also, among the royal MSS., is the Old Testament, Psalter, Hymns, &c. (2 B. vii.), formerly belonging to Queen Mary, bound in a truly regal style. It has thick boards covered with crimson velvet, richly embroidered with large flowers in coloured silks and gold twist. It is further embellished with gilt brass bosses and clasps, on the latter of which are engraved the arms of England.

Several other specimens of velvet binding are still in existence in our public libraries. This style continued in use till at least the end of the sixteenth century: Queen Elizabeth, on her visit to Cambridge, in 1578, was presented by the vice-chancellor with "a Newe Testament in Greek, of Robertus Stephanus,

* Horne's Int. i. 805.

his first printing in folio, bound in redd velvett, and lymed with gould; the armes of England sett upon eche side of the booke, vearey faire.”¹

A custom of perfuming books at this period is shown in the instructions relative to presents to the queen, sent by the Lord Treasurer Burghley to the vice-chancellor of the university on this occasion. He says “Present a book well bound,” and charges them “to regard that the book had no savour of spike, which commonly bookbinders did seek to add, to make their books savour well.”²

Every thing tends to show that Elizabeth was profuse in the embellishment of the bindings of her books; and this doubtless influenced many to present her works in a costume she would be likely to approve. Among the new year’s gifts, sent her in the twenty-seventh year of her reign, was a Bible from Absolon, master of the Savoy, bound in cloth of gold, garnished with silver and gilt, with two plates of the royal arms.³

Of the labour and expense incurred we have an illustration in the copy of archbishop Parker’s “*De Antiquitate Ecclesiae Britannicae*,” in the royal library in the British Museum, presented to her by the archbishop. It is a small folio of the date 1572, covered with green velvet, and the front or first side embroidered with coloured silks and silver thread, in

¹ Hartshorne’s Book Rarities of Cambridge, 5.—² Nichol’s Progresses of Elizabeth, ii. 1.—³ Ibid. Preface, xxvi.

deep relief, as accurately shown in the annexed plate. It is conjectured that the learned churchman intended the design as a reference to his name of Parker. It represents a park inclosed by railings, having in the centre a large rose tree, and deer in various positions. The reverse of the binding has a similar design, but the interior occupied by five deer, one in the centre reposing, the other four like those described, being transposed; two snakes and various small shrubs are disposed in the space between. The back is divided into five compartments, by embroidered lines, having a red rose with buds and branches between each, except the second from the head, on which has, at some subsequent period, been placed the title on a piece of leather, thus :—

PARKERUS
DE ANT
EC. BRIT.
LOND. 1572.

The bottom one bears on a small piece of leather, fixed on the embroidery—



EL.



R.

The book has been rebound in green morocco, but the sides and back as above described, placed over the morocco in a very creditable manner. It is now



Fac-simile of the Embroidered Velvet Binding of
Archbishop Parker's *De Antiquitate Eccle-
siae Britannicæ*, formerly belonging to
Queen Elizabeth

properly preserved in a red basin cover, and further protected by being placed in a box.

Another book of Elizabeth's, also in the British Museum, merits especial notice from its binding. It is the "Historia Ecclesia," printed at Louvain, in 1569, bound in green velvet, with the shield of the royal arms embroidered with coloured silks, and silver and gold thread on crimson silk, in the centre of each side. The remaining spaces are filled up with roses, foliage, &c. formed of the same materials, and some of the flowers composed of small pearls, many of which are lost. The back is similar to the last described, and bears the queen's initials.

Her successor, the first James, appears also to have been partial to a velvet exterior. Specimens may be cited :—among others, the "Panciroli Not Dignit," Lugduni, 1608, in light blue velvet, richly gilt, and having worked gilt edges on a red ground, partly left blank as ornament. But the most splendid specimen, and perhaps the most perfect, of early embroidery on books, is to be found in the British Museum, in the "Acta Synodi Dort," printed at the same place, in 1620, also once the property of James I. No engraving could give a proper idea of its splendour. It is a folio in crimson velvet, the arms of England being embroidered on both sides with gold thread, yellow silk forming the groundwork, but which is entirely hid by the gold, which is embroidered considerably in relief. The initial I surmounted by a crown is worked above, and R similarly below, as

are the rose and thistle in opposite corners. The bands on the back are formed with the like material, and the rose and thistle alternately between each. It is lettered on leather, the head-bands and gilt edges neatly executed, and the boards tied together in front with scarlet riband. Altogether the workmanship and material are of the first quality, and constitute it a regal book in every particular.

But velvet was not the only cover for books during this period; silk and damask were also in general use for that purpose. Alexander Barclay, in his "Ship of Fools," (1500—1552) speaking of the company, has the following lines, relative to the student or bookworm, whom he rather inconsistently places as the first fool in the vessel :—

" But yet I have them in great reverence,
And honour, saving them from filth and ordure;
By often brushing, and much diligence,
Full goodly bounde in pleasaunt coverture
Of damas, sattin, or els of velvet pure:
I keep them sure, fearing least they should be lost,
For in them is the cunning wherein I me boast."^b

The various extracts above cited, prove that velvet, silk, or damask were the principal covering made use of for the best bindings, up to the end of the fifteenth century, and continued to be partially used for books belonging to the royal library, a century after. In addition, it has been shown that they were lavishly ornamented with all the skill that in-

^b Warton, iii. 77.

genuity could devise. Nor did the highest and the fairest consider it beneath their dignity to exert their skill in this service, by adding to the covers the embroidered ornament before described. This is called Tambour binding, and a Psalter, bound with a large flower, worked in tambour upon one side of it, is in the British Museum, which flower is considered, by Dr. Dibdin,^c to be the work of Queen Mary. Be this conjecture or not, it is certain that ladies at this period were more conversant with this style of book ornament than a mere inspection would imply. Lady Jane Grey, in an exhortation written to her sister, the night before her execution, thus expresses herself :—" I have here sent you, my dear sister Katherine, a book, which although it be not outwardly trimmed with gold, or the curious embroidery of the artfullest needles, yet inwardly it is more worth than all the precious mines which the vast world can boast of," &c.^d A copy of this letter in the British Museum,^e varies a little from the above :—" I haue sent yo good sust^r K. a boke wh although it be not outwardly rimid with gold," &c.

From this, and the great love of books which Lady Jane Grey is known to have had, it may be pronounced all but certain that she was accustomed to employ some of the leisure she possessed in the embroidery of the covers of them. In the Bodleian

^c Bibliograp. Decameron, i. 99.—^d Nicolas's Lady Jane Grey, 41.—^e Harl. MSS. 2370.

library, at Oxford, is an English translation of St. Paul's Epistles, in a binding of this description executed by the princess Elizabeth, afterwards queen, while imprisoned at Woodstock, during the reign of her sister queen Mary. The cover is of black silk, curiously embroidered with mottos and devices. Round the extreme border of the upper side is worked

“ CŒLUM PATRIÆ. SCOPUS VITÆ XPVS.
CHRISTO VIVE.”

In the centre a *heart*, and about it,

“ ELEVA COR SURSUM IBI UBI E. C.”*

On the other side

“ BEATUS QUI DIVITIAS SCRIPTURÆ LE-
GENS VERBA VERTIT IN OPERA.”

And in the centre, round a star,

“ VICIT OMNIA PERTINAX VIRTUS E. C.”†

A volume of prayers bound in crimson velvet, among the royal MSS. in the British Museum, claims the same distinction as the preceding work. On each side is embroidered with silver thread a monogram, apparently composed of the letters R. H. K. N. A. and E. in high relief, with the letter H. above and below, and a rose at the four corners.¹

From what has been previously stated it is evident

Gent's. Mag. New Series, i. 63.

* *Est Christus.*—† *Elizabethæ Captivæ, or Elizabethæ Captiva.*—
NICHOLS' PROGRESSES, preface.

that Elizabeth was a great lover of books, and a munificent patron of all concerned in their embellishment. But she displayed her taste in this particular further than we have yet shown, by causing the binding to be composed entirely of silver or gold. Of this description is the "Golden Manual of Prayers." It is bound in solid gold, and she is said to have always carried it about with her, hanging by a gold chain. The subject on one of the sides represents the judgment of Solomon, whose sentence appears round the margin; on the other side is delineated the brazen serpent, with the wounded Israelites looking at it: the motto round the margin is the divine command given to Moses, relative to the making of this serpent. It has been engraved in the Gentleman's Magazine, and Mr. Horne's Introduction to Bibliography. In the inventory of Queen Elizabeth's jewels, plate, &c., made in the sixteenth year of her reign, several ornamental books are also described: amongst others, "Oone Gospell booke, covered with tissue and garnished on th' onside with the crucifix and the Queenes badges of silver guilt, poiz with wodde, leaves, and all, cxij oz." And "Oone booke of the Gospelles plated with silver, and guilt upon bourdes with the image of the crucifix ther upon, and iiiij evangelists in iiiij places, with two greate clasps of silver and guilt, poiz lii oz. gr. and weing with the bourdes, leaves, and binding, and the covering of red vellat, cxxjx oz."⁵

⁵ *Archæologia*, xiii. 221.

We have been led by the richness of these bindings to a comparatively recent period, and must now return to the beginning of the fifteenth century, and to the consideration of two other kinds of early binding, vellum and calf. We have before stated that a common forrel was the first cover for books in the monastic ages of this country. Several specimens of this description may be met with. The oldest still preserved is considered by Dr. Dibdin to be a copy of the "Turrecremata of Alric Han," 1467, the rarest book in earl Spencer's library, and still in good preservation. This description of binding was frequently so constructed as to leave a portion of the forrel or parchment projecting from the boards and wrapping over the foreedge so as to meet nearly in the centre of it, and more effectually preserve the book from injury. Vellum appears to have been introduced for binding in the early part of the fifteenth century, but at first was quite plain. At the same period or earlier, a covering of leather was made use of, but which species of binding having continued in general use up to the present time, we shall proceed with the description of vellum binding first. It cannot be positively stated in what year vellum began to be stamped, but we shall not be far wrong in fixing the introduction of this embellishment about the end of the fifteenth, or the beginning of the sixteenth century. It is evident the art was known in 1467, as David Casley, before referred to, describes the bind-

ing of a MS. of the Epistles of St. Jerome, as bearing the following inscription :— “ Liber ligatus erat Oxonii, in Catstrete, ad instantiam Reuerendi Domini Thome Wybarun, in sacra theologia Bacalarii Monachi Roffensis, Anno Domini, 1467.”^b This is the earliest date known to have existed on the cover of a book, but it unfortunately has been replaced by a modern binding, and the original lost for ever.

Of these vellum stamped bindings innumerable specimens exist in various libraries, particularly the *Basil books* of the sixteenth century. Nothing can exceed the delicacy and beauty of the execution of some of them, and for sharpness, brilliancy, and proportion, no ornamental decoration of modern days has yet been introduced that can fairly take precedence of these works of the binders of early times. Whether the talented artists who executed many of these were natives or settlers in London, Oxford, or Cambridge, or of other towns on the continent where printing had made greater progress, cannot now be stated, though from what will hereafter be advanced it is reasonable to suppose many of them were produced in this country, for the race of bookbinders in 1553, was sufficiently numerous in England, and of such consideration, as to be expressly protected by an act of parliament against their foreign competitors.^c Some of the most costly are impressed with a

^a MSS. Reg. 6. D. II.—See Dibdin's Bib. Dec. ii. 449.—

^b See Act 25 Henry VIII. 1533.

design nearly the full space of the boards ; others are ornamented with portraits, arms, mottos, or elaborate devices ; and the year in which the book was bound was frequently impressed in large figures on its covers.

When the art of impressing these designs on the side was first introduced cannot be ascertained. It will be seen that it had been employed on leather previously to vellum, but it must have been a work of some time to bring it to that perfection which we witness on some early covers. In the absence of earlier data, the most reasonable conjecture appears to be that the effects produced by the printing press, suggested to the minds of the early practisers of that art, the idea of giving, by means of impression from wooden blocks, an additional beauty to the side covers of their books, and that it speedily followed the invention of printing in 1438. But if, by any existing specimens of binding of this character, it could be proved to have preceded that era, it might become a matter of much speculation, how far the result had an influence in the first essays in block printing by Gutenberg and others.

Specimens of this stamped vellum covering may be seen in the British Museum, as well as the libraries of the curious, and among the splendid stocks of the principal old booksellers of the day ; some executed with a finish not yet in modern times equalled, and some bearing a confused mass of ornament too close

to produce any effect. The portrait of Luther is from



the cover of a book bound in 1569, which bears a similar one of Calvin on the reverse. It was in the possession of Dr. Dibdin, who describes the portraits as being executed with great spirit and accuracy, and surrounded with ornamental borders of much taste and richness.^k As this subject will be more fully discussed under the head of Stamped Leather Bindings, specimens of which are much more numerous,

^k *Bibliomania*, 158.

we shall defer further mention of this style here. But it may be stated that from a passage in "The Devil's Law Case," a drama by John Webster, first published in 1623, it is very evident that gold ornament had been long familiarly known as applied to vellum binding, at that period. He says

" There's in my closet
A prayer-book that is covered with *gilt vellum*,
Fetch it."¹

Of the early use of leather, Montfaucon mentions several specimens of calf-skin glued boards; and Robert Copeland, in his poetical prefix to Chaucer's Assembly of Fools, 1530, says

" Chaucer is dede, the which this pamphlete wrate
So ben his heyres in all such besynesse
And gone is also the famous clerke Lydgate
And so is younge Hawes, god theye soules addresse
Many were the volumes that they made more or lesse
Theyr booke ye lay up tyll that the *lether* moules."²

This extract from Copeland proves leather to have been the common material for the covers of general works previous to, and in his time. But a stamped leather binding on oaken boards, as before referred to, was, in a period earlier, peculiar in the style of bookbinding. Dr. Dibdin has given several engraved specimens in his Bibliographer's Decameron, and in citing his description of them, we have pleasure in acknowledging the handsome manner in which permission has been granted to copy some of the engravings in illustration of the present work.

¹ Webster's Dram. Works, ii. 128. Pickering, 1830.—
² Dibdin's Typ. Antiq. ii. 279.

He first speaks of a copy of the *Spira Livy*, of 1470, in the collection of the Right Honourable Thomas Grenville, as an "extremely perfect and magnificent specimen of this oak-covered leather binding," and of a *Mazarin Bible*, of the supposed date of 1455, in the possession of the late Mr. George Nicol, bookseller to the king, the latter of which "exhibits the central and corner bosses upon the stamped-calf covered boards, into which it was originally put; possibly under the superintendence of old *Fust* himself." Neither of these, he considers, can be later than the year 1472, but the latter probably full twelve years earlier. An old cover of a MS. of *Claudian* of the thirteenth century, in the British Museum, is a very early specimen of this style. The leather is of a dark colour, having the interior cover of vellum attached to it. The ornaments are displayed with taste and much diversified, being representations of birds, animals, and the human figure, some of them with inscriptions, as

"PAVLVS" "A. GNVSDEI."

"I will now continue" says the Doctor, "the history of this characteristic stamped-calf binding. Portraits or small historical subjects are however rarely seen before the year 1480: as arabesque were the prevailing ornaments during the fifteenth century. They began pretty early in the sixteenth century with these portraits or small historical subjects. About a dozen years later (1526), as I conceive, is the com-

position of the *Vision of Augustus*, exhibited upon the same kind of binding. The plate represents the subject. It was taken from an old cover, like that of Claudian, which was lent to me by Mr. Buckman, who had considered it to be an object of some little curiosity. Do the initials below designate the name of the artist who achieved this wonderful deed?"

As it will be found that several of the early printers usually impressed their *monogram* or *typographical device* on the sides of their books, we shall not be hazarding much on the above, in according the initials and designs at the bottom, to some early professor of the art, particularly when it is found that even the names of many were impressed in full, either round the borders or at the foot, as thus

LVDVICVS * BLOC * OB * LAVDEM *
XPRISTI* LIBRVM* HVNC* RECTE* LIGAVI

A small folio missal of the latter end of the fifteenth century, the property of the late Mr. Henry Broadley, of Ferrily near Hull, presented in the centre of a stamped calf binding in four compartments the name of **JOHANNES GVILLEBERT** as the binder. In the collection of the late Mr. Douce, now in the Bodleian library, Oxford, is a specimen with this inscription:

"**JORIS DE GAITERE ME LIGAVIT IN GANDAVO**
OMNES SANCTI ANGELI ET ARCHANGELI DEI
ORATE PRO NOBIS."

Another cover bears the name of "**JEHAN NORRIS.**"

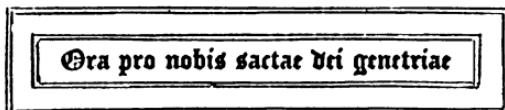


The Vision of Augustus, from a Stamped Calf
Binding of the Fifteenth Century.



Side Cover of a Stamped Calf Binding
of the Fifteenth Century.

Initial letters and names in full length may be met with on many of the specimens of early workmanship. On others inscriptions only, as



which occurs on the side covers of a work printed at Strasburgh, in 1527.^o But a much earlier specimen is found in the facsimile of the stamped-leather cover of a MS. *Biblia-Sacra*, on vellum, with an illumination of the Madonna and child, from the fine collection of Mr. James Bohn, Bookseller, London. It is very boldly impressed on the leather, which forms the cover of the MS. without any addition of boards, being simply attached to the back. The design fills the whole space on the sides.

The *Anthologia Græcæ*, of 1494, in the Cracherode collection in the British Museum, is a very early specimen of stamped binding.—most probably of the same period, the year being dated on the back. It is also of a very curious character, presenting some features requiring particular notice. The book is covered with a deep red basin, and to the eye of the unpractised would be taken for an inferior kind of morocco. This leather is *worked* into a groove formed deep on the edges, so as to

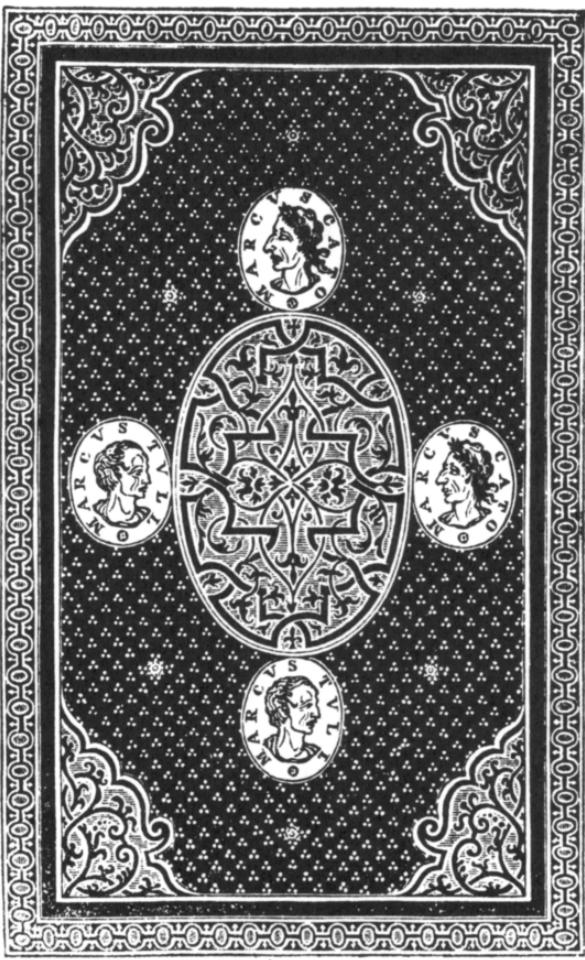
^o Dibdin's Bib. Decameron, ii. 468.

present the appearance of a double board. No ornament is seen on any part except the centre of the boards, which have been hollowed out in the form of a circle so as to admit the portraits. These portraits consist of cameo heads of Philip and Alexander, the latter being inscribed. Whether they were impressed previous to the cover being fixed, admits of a question; certain it is they could not have been executed after covering unless the dies were shaped so as to fit the cavity formed in the board. The cameos are plain; a gold zig-zag pattern is worked round the circle of the indentations. The book has gilt edges, and worked worsted headbands. This description of binding is rare. Earl Spenser possesses a *SIDONIUS APOLLINARIS*, printed at Basil in 1542, in this characteristic cameo binding. The ornament, in hollow, represents Pegasus on a rock, with a charioteer driving two horses towards it, with an inscription of

ΟΡΕΩΣ ΚΑΙ ΜΗ ΛΟΞΙΩΣ.[¶]

Of this binding with cameo heads, the side cover of a *PETRARCA OPERA*, printed at Basil, two years after the *Sidonius* last named, is a very elaborate and beautiful specimen. It is in the British Museum, (3 DL.) The whole of the ornament is worked in gold, in a clear, distinct, and superior manner. The book has been rebound; but the sides of the original binding, which measure thirteen inches by eight, are preserved and fixed on the modern with much judgment. The

" Dibdin's Bib. Decameron, ii. 469.



Fac-simile of a Gift Calf Binding, d. 1544.,
in the British Museum.

illustration displays the subject sufficiently clear to require no further explanation, and with it we close the account of early stamped bindings.

As books became more numerous from the progress the art of printing slowly but steadily made, the degree of labour and expense shown to have been lavished on early bindings, was only adopted for rare specimens of the works of ancient writers, or the books of the noble and wealthy. In the edition of the *Philobiblon* of Richard of Bury, printed in 1599, the altered condition from their splendour is thus expressed:—“*Qui (libri) olim purpura vestiebantur et lyso, nunc in cinere et cilicio recubantes.*” &c.

Several books in the British Museum, but particularly those once the property of archbishop Cranmer, evidence the truth of the above quotation. The latter are bound in a plain brown calf, with the simple addition of a *mitre*, gilt on the back, in an extremely uneven and careless manner. The frontispiece by Hans Holbein, to Cranmer’s Bible, which represents Henry VIII. distributing copies of it to the various estates of the realm, displays the binding of all to be of a humble character with clasps. Many presentation copies would be bound in a superior manner, but this shows that the generality of bindings were at that time without much ornament. Stamped calf bindings gave place to almost as great a variety of styles in calf as are common in the present day; and some of the superior kind still remain to attest the skill of the artists employed, when the cost necessary

for the execution of good binding, was allowed. A folio in the library of the late Mr. Heber formerly belonging to Henry VIII. displayed a great variety of ornament, with the portrait of the monarch painted in the centre of each side, all in good keeping and well executed. A very similar binding remains on a French Bible, printed at Lyons by Sebastian Honorati, A.D. 1566, once the property of queen Elizabeth, and now in the British Museum. By the date, 1567, on the binding, it appears to have been purposely executed for her. The book has been rebound, but the whole, or greater part of the ornament on the sides, ingeniously cut out, and fixed to those of the new cover. The original binding was in calf, and the outline of the design strongly impressed, worked with gold, and coloured with white, scarlet, purple, and green, something like the illuminated bindings of the present day. The general outline is of a most elaborate nature, scrolls and ornamental detail being worked in a uniform manner round an oval in the centre, and terminating in elegant corners, &c. The oval in the front, which measures three inches long, contains a miniature portrait of Elizabeth, with a sceptre, but now much defaced. Round it, on the *garter*, is impressed in gilt letters

ELIZABETH. DEI. GRATIA. ANG. FRAN. ET.
HIB. REGINA.

The other side is equally ornamented, but having in the centre the royal arms, and inscribed round,

POSVI. DEVVM. ADIVTOREM. MEVM.

One of the compartments, under the portrait of the queen, is filled up with the following design, worked in gold.



The book is seventeen inches long, and near eleven wide. The edges are gilt upon red, with minute dotted scroll-work added.

Another book of Elizabeth's, in the British Museum, "Petri Bembi Cardinalis Historiæ Venetiæ, lib. xii.", a folio printed at Venice in 1551, is a curious specimen of binding. The book has no back, but has been cut like the edges and stabbed through, a piece of gilt paper being pasted over. The boards are fastened to the leaves and project over on all sides, similar to the Ceylonese style, which will be seen further on. The boards are covered with brown calf, and a scroll pattern in gold worked on them. The inside of the scrolls are stained black, and the gilding is not well executed. In one circle formed on the side is lettered

DIEV
ET MON
DROYT

and in a corresponding one lower down, the year in which it was bound.

M. D. L. II.

In two smaller circles are placed the queen's initials, thus :—

E—R

surmounted by the crown.

In the British Museum, is also a “ Ciceronis Orationes,” 2 vols. 12mo. Aldine 1540, in another curious style of binding of this period. It is in calf, the ornament painted on the sides with a variety of colours. This consists of a series of scroll-work, surrounding a crest of a dog. The binding is rather clumsy.

These specimens will be sufficient, establishing, as they do, that the binders of this period had introduced a variety of styles in the bindings of books, and were still lavish of ornament. That they continued so to do in the reign of James I. there will shortly be occasion to show, where some additional facts will also be produced, in descanting on another material for the covers of books, adopted at a later date, and from its quality and durability, ever since preferred for the best bindings.

Some light is derived relative to the materials used for covers during the period we have been illustrating, from a letter of the High Commissioners in Elizabeth's reign, concerning superstitious books belonging to

All Soul's College, Oxford, in 1567, which are described as—"A Psalter covered with skin ; a prick-song book covered with a hart's skin ; five other of paper bound in parchment ; and the Founder's Mass book in parchment, bound in board."^q

The introduction of morocco, as a covering for books, must be dated at a later period than vellum or calf, and the merit of its application given to the binders of the continent, to whose workmanship and this species of binding we shall, in a subsequent chapter, more particularly devote our attention ; though some early specimens in this style exist in our libraries, the works of English binders of no mean merit. One, the celebrated Charter, erroneously attributed to king Edgar, in the British Museum,^r is splendidly bound in red morocco, and lettered, "CARTA REGIS EADGARI : MARIUM BRIT. DOMINI." This book is placed on a green silk cushion in a case lined with green velvet, and covered with a large plate of glass.

When this book was bound cannot now be ascertained ; but at a much later period than the execution of the text. To James I. must be accorded the merit of introducing morocco as a *general* cover for the binding of his books. Specimens in velvet belonging to him have been before described as remaining in the British Museum. In the same national depository are several morocco bindings bearing his initials and

^q Nichol's Progresses of Queen Eliz. i. 107.—^r Harl. MSS. 7513.

the royal arms, and such a profusion of gilt ornament as to nearly cover the sides. The "Thevet Hommes Illustres," large folio, Paris, 1584, is in green morocco, the royal arms in the centre, surrounded by scroll and ornamental work. Another, the "Cæremoniaile Episcoporum," folio, Rome, 1600, bears the shield of the royal arms in the centre, and the remaining space completely studded with the rose, thistle, &c. The like ornament is also found on another folio, bearing the initials of Charles I.

But James VI., of Scotland, who, by the death of Elizabeth, became the first of England, had long been a patron of bookbinders. A great lover of literature, like many of his royal predecessors, he transferred to the covers of his books some idea of his estimation of their contents. A document found by Mr. Thomson, of the Record Office, Edinburgh, and published by the Bannatyne Club,* not only gives an account of this monarch's books, but many notices of the sums paid to, and transactions with booksellers, printers, and binders. Our subject relates to the latter, and fortunately many items occur which throw considerable light on the sort of bindings and prices paid in the northern capital about the year 1580.

We have seen that there was the "king's bookbinder" in the time of Henry VIII., and here we have an appointment of John Gibson, under the privy seal, dated at Dalkeith, 29th July, 1581, to the like office under James VI.

* The Library of Mary, Queen of Scots, and James VI. 4to.

" Ane letter maid to Johne Gibbsoun bukebinder,
makand him Our Soverane Lordis Buikbinder, and
gevand to him the office thairof for all the dayis of
his lyfetyme, &c. &c. For using and exercising
quhairof his heines gevis grantis and assignis to the
said Johne yeirlie the sowme of tuentie pundis usuall
money of this realme, to be payit to him yierlie."

In the previous year a long account of this John Gibson's, for work done for the king, presents, among fifty-nine different books, the following items selected according to sizes to show the variation in price.

JOHNE GIBSONIS BUIKBINDERS PRECEPT.

Zanthis [Zanchius] de tribus elohim fol. gylt,	
pryce	xx s
Harmonia Stanhursti fo. in vellene, pryce .	x s
Dictionarium in latino græco et gallico ser-	
mone 4° gylt, pryce	xx s
Budæus de contemptu rerum fortuitarum 4° in	
vellene	vij s viij d
Commentaria in Suetonium 8° gylt, pryce .	x s
Thesaurus pauperum 8° In vellene	v s
Petronius Arbiter 8° In parchment	iij s
Orationes clarorum virorum 16° gylt, pryce .	x s
P. Yowng. Summa of this compt is	
xvij li. iiiij s iiiij d.	

On the back of this account is an order upon the treasurer, subscribed by the king, and the abbots of Dunfermline and Cambuskenneth, as follows:—

REX.

Thesauraire we greit yow weill IT is our will and we charge yow that ye Incontinent efter the sycht heirof answer our louit Johnne gipsoun buikbindar of the sowme of sevintene pundis iiij s iiij d within mentionat To be thankefullie allowit to yow in your comptis keping this our precept together with the said Johnne his acquittance thairvpoun for your warrand Subscryuit with our hand At Halyrudehous the first day of October 1580.

JAMES R.

R DUNFERMLINE A CAMBUSKENNETH

Here we have also further Gibson's receipt :—

“ I Johnne Gibbsoun be the tennor heirof grant me to haue ressauit fra Robert coluill of cleishe in name of my lord thesaurar the sowme of sevintene punde iiijs iiijd conforme to yis compt and precept within writtin off ye qlk sowme I hald me weill qtent and payit and discharge him hereof for euir Be thir p'nte subscyuit with my hand At Edr the xv day of november 1580.

Johnegybsone wt my hand.

Whether Gibson came to England with James cannot be determined, or if any of the specimens we have before described are to be attributed to him must alike remain in doubt. The sums paid him were for such work as was at the time adopted for the general bindings of the possessors of libraries at that period :

Gylt price referring to a superior binding in leather, perhaps *morocco*, as it is seen that about double the price of that paid for *vellene* is charged. Vellum graced the general class of reading books, and *parchment* afforded a protection for the least valued.

James, on coming to the English throne, continued, and most probably extended his patronage of the art. The specimens described at page 79, show him to have been lavish of ornament, and of his regard for literature an instance may be cited from a speech delivered on the occasion of his visit to the Bodleian Library at Oxford, wherein he stated, "if he were not a king, he would desire to have no other prison, and to be chained together with so many good authors."¹

The various styles previously described continued to be practised to the end of the seventeenth century by a few, but the general character of bookbinding for some time before and up to the close of that period, had become much depreciated, as there will be occasion to show. The materials adopted by Sir Thomas Bodley were principally leather and vellum, and occasionally velvet, as in the princes' (afterwards Charles I.) books,² which he had presented to the library. The statutes which he left, and now in the library, show that where it could be conveniently done, he preferred leather to vellum as a cover for his books.

¹ Hearne's Relique Bodleianæ, 1703.—Introduction. ——

² Hearne's Rel. Bodl. 217.

“Statuimus etiam, ut libri in posterum de novo ligandi aut campingendi, sint omnes si commode fieri possit coriacei non membranacei.”^{*}

The styles and colours he adopted were various. He directs that care be taken in the appointment of “the scholars to transmit the books from the packages, that none be embezzled by reason of the *fine binding* of some of the volumes.”^{**} And again, “I pray you continue your purpose for colouring such books as you fancy most.”^{***} Others he orders to be *gilded*, and gives directions in almost every letter, relative to some department of binding and ornamenting the books.

During some portion of the period we have been treating, the binders of the universities of Oxford and Cambridge were celebrated for their skill in the art. In the year 1588, we find Dr. James, the first appointed librarian of the Bodleian Library at Oxford, had complained to his patron of the London binding, and Sir Thomas Bodley replying, “Would to God you had signified wherein the abuses of our London binding did consist.”[†] And again, wishing to know for what price “Dominick and Mills,” two Oxford binders, would execute an ordinary volume in folio.[‡] He afterwards appears to have employed these or other artists, for in another letter to the librarian, he says, “I pray you put as many to binding of the

^{*} Appendix Statutorum, 24.—^{**} Hearne's Rel. Bodl. 274.
—^{***} Ibid. 218.—[†] Ibid. 159.—[‡] Ibid. 186.

books, as you shall think convenient, of which I would have some dozen of the better paper, to be trimmed with *gilding* and strings;"^a and sends, at another time, "money for their bindings, chainings, placings,"^b &c.

The establishment of the Bodleian gave a stimulus to every thing connected with books in Oxford, which though in some repute as respected binding, still must have been limited in extent, as the libraries there were not previously remarkable for superiority. And according to Sir Thomas Bodley, Cambridge was less so, as he remarks after his visit to that university, "the libraries are meanly stored, and Trinity College worst of all."^c

The bindings of Cambridge, however, enjoyed an equal reputation with Oxford. A decree of the university several years before (A.D. 1523), provided "that every bookbinder, bookseller, and stationer, should stand severally bound to the university in the sum of £40, and that they should from time to time provide sufficient store of all manner of books fit and requisite for the furnishing of students; and that all the books should be *well bound*, and be sold at all times upon reasonable prices."^d The binders in Cambridge at this period exercised also the trades of booksellers, printers, and stationers.^e Roger Ascham mentions one Garrett "our booke-bynder," as being resident here about the year 1544.^f

^a Hearne's Rel. Bodl. 342.—^b Ibid. 363.—^c Ibid. 195.

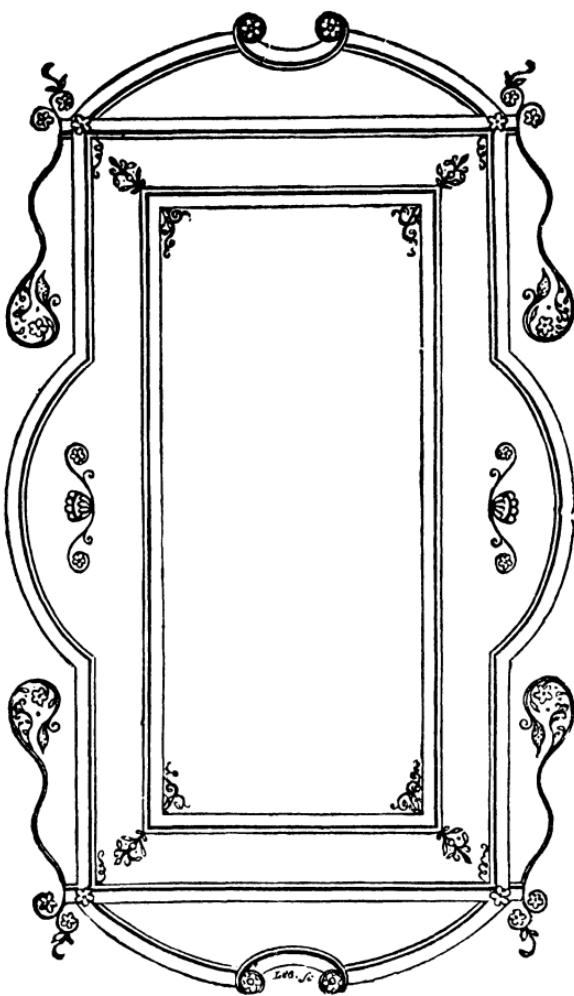
^d Harl. MSS. 7050.—^e Gent.'s Mag. 1781, 409.—

^f Ascham's Eng. Works, 77.

The universities appear to have kept up the reputation of their bindings during and after the troubled times of the middle of the seventeenth century. The opposite fac-simile of the decorative part of the side covers of a large folio Bible, printed at Cambridge, by John Field, 1659, and evidently the work of the same period, displays a degree of taste not often met with in the general volumes of the time. The cover is of black basin, the back full gilt, as well as the squares and edges of the boards. The edges are gilt in a superior manner, and the binding altogether well executed. This book is now in the possession of Edward Finch Hatton, Esq., of London. At the commencement of the last century a distinguished binder of the name of Dawson, resided in Cambridge.^a

During the period we have been treating of, several valuable libraries were formed in this country. In the reign of Henry VI. the library of duke Humphrey was collected at Oxford. Edward IV. and Henry VII., by their encouragement of printing, and purchases of works printed on the continent, considerably promoted the cause of learning in England. The foundation of the royal library, from which so many specimens have been produced in illustration of the previous pages, may justly be attributed to Henry VIII., enriched as it was by MSS. collected by Leland.^b And, in conclusion, it may be stated that, from

^a Hartshorne's Book Rarities of Cambridge, 18.—^b Astle's Writing, xx.



Morocco Binding of a Folio Cambridge Bible,
A. D. 1659.

the invention of printing to the close of the seventeenth century, as in monastic times, the churchmen and lovers of books exercised not only considerable influence in the style and mode of binding, but were also well acquainted with the minute details of its practice. Some instances have been cited, and many other notices fully establish the fact.

Myles Coverdale, in a letter to Thomas lord Cromwell, relative to his translation of the Bible, says, A. D. 1538, "As concernyng y^e New Testament in English, y^e copy whereof yor good lordshippe receaved lately a boke by y^r servant Sebastian y^e coke. I besech y^r L. to consydre y^e grenesse thereof, which (for lack of tyme,) can not as yet be so apte to be bounde as it should be."¹ Archbishop Parker, of whom we have before made mention, maintained in Lambeth Palace, printers, limners, woodcutters, and bookbinders,² and unquestionably understood something of their various arts. But Sir Thomas Bodley displays a perfect knowledge of every thing connected with the subject. In his various letters to Dr. James, he is continually giving directions relative to the bindings of the books in vellum and leather; ordering them to be rubbed by the keeper with clean cloths, as a precaution against mould and worms; and making provision for a proper supply of bars, locks, hasps, grates, clasps, wire,

¹ Smith's Facsimiles, plate 17.—² Gent.'s Mag. N. Series, i. 63.

chains, and ginnios of iron, "belonging to the fastening and rivetting of the books."¹ Bodley's great contemporary, Sir Robert Cotton, was also, doubtless, equally well versed in the details of binding. Sir Matthew Hale, in bequeathing a collection of MSS. to the library of Lincoln's Inn, says, "They are fit to be bound in *leather*, and *chained*, and kept in archives. Cosen, bishop of Durham, who will be more particularly referred to in the next division of the work, appears to have not been less versed in the art than those who preceded him. His directions are as minute as to the paring of the leather, lettering the books &c., as any professed artist could give, and his secretary expressly directs that the silver plates for some of the books should be of proper thickness, and enters into many other particulars, which will be detailed in the investigation of some peculiarities in bindings connected with the period we have so far investigated.

¹Hearn's Rel. Bodleianæ. ——² Appendix to Report on Public Records.

CHAPTER V.

ENGLISH BINDING AND BINDERS, FROM THE INVENTION OF PRINTING TO THE EIGHTEENTH CENTURY, IN REFERENCE TO THE STYLES OF WORKMANSHIP, AND SOME OTHER INCIDENTAL PECULIARITIES.

In tracing the history of English bookbinding, as more particularly connected with the materials used and style adopted by the successive races of bookbinders, other facts illustrative of the art, during the period embraced in the previous chapter, have been introduced, but many others remain to be recorded. We shall, therefore, in now taking a view of the peculiarities, manner, and execution of bindings in two periods, viz. the sixteenth and seventeenth centuries, introduce such records as have been met with further illustrative of the subject.

The influence of circumstances is seen in the exterior of early printed books and manuscripts, bound after the invention of printing. Luxury and splendour were studied by the great, and a considerable degree of elegance by all classes of scholars, which

arose from the limited number of copies printed, and the consequent value of them to the possessors. The folio and the quarto were the usual sizes, which from their breadth afforded ample room for the display of whatever taste the ingenuity of the binder might suggest; and from the specimens which have been given of the embellishment of their side covers, it is evident that they were no mean artists. The multiplication of books, it has been seen, led to a less expensive mode of binding, though still retaining much ornamental beauty. This may be pronounced the style peculiar to the sixteenth century. In the whole of the bindings of this period, a minute care attended every operation required. The workmen, or perhaps the printers, whom it has been shown, were also the binders of their works, appear to have been desirous to thus preserve them to posterity. They are folded with an anxious care for the evenness and integrity of the margins, and it is rare that any transpositions of sheets are found. To guard against this, in the infancy of printing, they had a *Registrum Chartarum*, for the convenience of the binder, of the signatures and first words of the sheets. About 1469—70, alphabetical tables of the first words of each chapter were also introduced as a guide to the binder. The name and place of the inventor of signatures is not known; they appear in an edition of Terence, printed at Milan, in 1470, and were introduced by Caxton in 1480. The Abbé Reve ascribes the discovery to

John Koelhof, at Cologne, in 1472.* There is a solidity about these books, which testifies no little labour in the beating and pressing of the sheets when folded. They continued the use of a slip of parchment round the end-papers, and first and last sheets of many, to preserve the backs from injury, and to strengthen the joint. The last leaf is also strengthened with the addition of other paper, and in this position the fragments of some printed works and prints, previously unknown, have been discovered.

They are sewn on a series of strong slips of white leather, placed at equal distances from each other, so as to form the division of the back when covered. Sometimes, double bands, arranged close together, are seen, the thread tightly and firmly drawn round in the sewing. These double bands are very distinguishable on the cover, a line being run across in the small grove between them. The solidity of this portion of the bindings of the sixteenth century, coupled with the formation of the back, is seen in many books which still remain perfectly firm after the cover has been worn away, nothing but damp appearing to affect them.

The boards are generally of oak, but planed thinner than those of the period preceding. Some of them are bevelled off to a fine edge, slanting from the leaves of the book. The bands or thongs of leather are laced into the board in a similar manner to the present

* Johnson's *Typographia*, i. 68.

mode, but part of the wood cut away to make room for them.

The edges, which are generally cut very true, are sometimes plain, but the best works gilt. The latter are exceedingly well executed, being, with the exception of a little tarnish, still very perfect, brilliant, and of a yellow tint, mellowed by age. Some are also blind-tooled after the first gilding, giving a very rich effect. The headbands are sometimes worked in a similar manner to those of modern days, sometimes composed of a round plaited twist, fastened at each end, and at others of strips of coloured leather worked one over the other.

The oaken boards are found covered with vellum and calf. The covers *appear* to have been stretched tightly over, the arabesque and ornamental tooling being executed afterwards. Manual labour and machinery seem to have jointly assisted in this branch of the art, it being evident a high degree of pressure, and quickness of execution, was necessary to give the peculiar finish and sharpness many of the designs exhibit. There is scarcely any end to the variety of the embellishments; portraits, flowers, mottos, scrolls, and elaborate designs, are profusely spread over the sides, with the greatest propriety of style and good taste; while the backs are frequently covered with small ornament of a pleasing character. The artists who executed them never lost sight of the effect of true proportion; and the spirit of all their ornamental decoration is a reflection on the taste of

their successors of the seventeenth century, and even of many sons of the craft of times near the present.

The early printers incorporated their typographical device with the designs on the covers. Richard Pynson caused many pretty devices to be stamped on the covers of the books he printed. And Reynes, who lived in St. Paul's Church Yard about the year 1527, embossed his monogram on the books he bound for himself and others. He introduced this in a large design which he embossed, on the covers of his books, consisting of what are usually called "the arms of Christ." This design is formed of a parallelogram, surrounded by double lines, and borders of scroll and ornamental work, shaped like an arch within, under which is placed a shield, charged with the emblems of Christ's passion, as the cross, inscription, and crown of thorns; the hammer, nails, and pincers; the spears, sponge, and dice; the garment, money, lanthorn, sepulchre, &c. The escutcheon is supported by two unicorns, which stand upon a scroll, bearing the motto,

"**REDEMPTORIS MVNDI ARMI,**"

in rude Saxon capitals. Above the shield is a rich full-faced black helmet, surrounded by mantling, and surmounted by the pillar, scourges, and cock, as a crest. On each side of the crest are the two shields above mentioned. These religious emblems are found on a great number of Missals, Offices, and Hours of Devotion, both manuscript and printed.^b

^bJohnson's *Typographia*, i. 503.

The gilding of this period is good, a cleanliness and distinctness of ornament being generally found. The titles of the books were not lettered on the backs, such as have them are the additions of a more recent period. The custom was to letter them on the fore-edges of the books with ink, as seen in the engraving, page 116. On others they wrote or printed the name on the sides. Sometimes these titles were covered with horn, as has been before shown, and may be seen in a copy of the Hebrew Pentateuch, in four large folio volumes, in the library of Merton College, Oxford.

A curious specimen of binding of this period is mentioned by Scaliger, as being on a printed Psalter his mother possessed. He says the cover was two inches thick, and in the inside was a kind of cupboard, wherein was a small silver crucifix, and behind it the name of *Berenica Codronia de la Scala*.^c This kind of binding was not unusual on small books of devotion, containing, like the above, some small subject of adoration, or relic of a saint. Mr. Hansard speaks of a book he had seen with a recess for a relic, and the relic a human toe.^d

The larger volumes of this period are further protected by the addition of metal clasps, corners, bosses, and bands. The clasps are sometimes attached to strips of strong leather, fastened to the boards with rivets, in which way the catch is also secured. Others are of a more elaborate workmanship and finish, being

^c Palmer's History of Printing, 96.—^d Typographia, 105.

jointed to a piece of the same material, firmly rivetted to the sides. The boards are further protected by corners of brass, frequently much ornamented, and extending a considerable way on the cover. On others, a plain piece of brass, wrapping only a small space over, and others simply protected by brass bands rivetted to the edges of the boards. The centres of the boards often present a large plate or boss of brass, similar in character to the clasps and corners.

Notices of the earlier use of bosses, clasps, and corners, have before been given. Wood's MS., in the Bodleian library at Oxford, was once very superbly bound and embossed. Much of its beauty is now defaced; but on the bosses at each corner is still discernible **AVE MARIA GRATIA PLENAE.** The colophon states it to have been finished in 1558.^e A folio Bible, printed by Barker, in archbishop Whitgift's hospital at Croydon, Surrey, given by Abraham Hartwell, secretary to the archbishop, in 1559, presents a very good specimen of the bindings of the period. It has a very curiously ornamented cover, protected by large brass bosses and clasps. In the library at Lambeth Palace, is a characteristic binding of the period, richly covered with gilt ornament, on a copy of archbishop Parker's edition of the Psalms, 4to. 1570.

To prevent the books being abstracted from their libraries, the worthies of this period were accustomed

^e Warton, 136.

to chain them to the shelves. Of this peculiarity an early notice occurs relative to the books left by Richard de Bury, to (Durham) Trinity college, Oxford, in 1345. After the college became possessed of them, they were for many years kept in chests under the custody of several scholars deputed for that purpose, and a library being built in the reign of king Henry IV., these books were put into pews or studies, and chained to them. They continued in this manner till the college was dissolved by Henry VIII., when they were conveyed away, some to Duke Humphrey's library.⁴ Leland, (1538) speaking of Wressel Castle, Yorkshire, says, "One thing I likid exceedingly yn one of the towers, that was a Study, caullid Paradise; wher was a closet in the midle, of 8 Squares latised aboute, and at the Toppe of every Square was a Desk ledgid to set Bookes on Cofers withyn them, and these semid as yoinid hard to the Toppe of the Closet; and yet by pulling, one or al wold cum downe briste highe in rabettes, and serve for Deskes to lay Bookes on."

In an old account book of St. John's College, Cambridge, is this entry :—

" Anno 1556. For chains for the books in this library, 3s. Anno 1560. For chaining the books in the library, 4s." And among the articles for keeping the Universitie Librarie, Maie 1582—" If any chaine, clasps, rope, or such like decay happen to be, the sayd keeper to signify the same unto the v. chan-

⁴ King's Munimenta Antiqua, 152, and Warton.—⁵ Itinerary, i. 62.

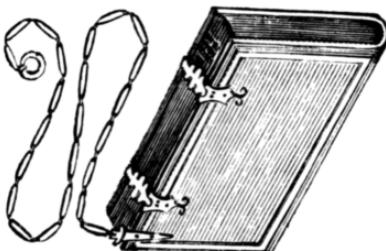
cellour within three days after he shall spy such default, to the ende the same may be amended." That books were frequently chained to desks, we learn from Wood, who, in speaking of "Foulis's History of the Plots and Conspiracies of our pretended Saints the Presbyterians," says, "this book hath been so pleasing to the royalists, that they have chained it to desks in public places for the vulgar to read."

Fox's Book of Martyrs was very generally chained in the churches; and long prior to its publication many other books were in like manner secured. Sir Thomas Lyttleton, knight, bequeathed, A. D. 1481, "to the abbot and convent of Hales-Owen, a boke wherein is contaigned the Constitutions Provincial and De Gestis Romanorum, and other treatis therein, which I wull be laid and bounded with an yron chayne in some convenient parte within the saide church, at my costs, so that all preests and others may se and rede it whenne it pleaseth them."ⁱ

In the church of Grantham, Lincolnshire, was a library remarkable for being one of the very few remaining that had its volumes chained to the shelves.^k The books here are now fast going to decay from neglect. There are about two hundred volumes, principally divinity, in various bindings of calf and vellum, with wooden boards or strong pasteboard.

ⁱ Nicolas's Test. Vetusta, i. 367.—^k Hartshorne's Book Rarities of Cambridge, 17.

The greater portion have a chain attached, as is seen by the sketch of one of the books in this library; which also displays the early custom before referred to of



lettering the titles on the fore-edge of the leaves. These books were formerly fixed to strong desks or benches, the ring at the end of the chain being attached to a bolt fastened to the shelves. It is supposed that this library was first neglected about one hundred and seventy years ago, when, from a great fire that took place in the town, a number of the sufferers were allowed to take refuge in it, until better accommodation could be provided for them; to the great injury of the books, and their total neglect ever after.

This custom of chaining books appears to have been very generally adopted in all public libraries. In the first draft of the statutes Sir Thomas Bodley drew up for his library, he observes, "As it may be lawful and free for all comers in, to peruse any volumes that are chained to the desks, in the body of the library, not forgetting to fasten their clasps and

strings, to untangle their chains,"¹ &c. He speaks in one of his letters of their being "chained to prevent embezzlement,"² and that they had better be clasped after they are chained. His orders for chains are very frequent and very extensive; on one occasion for a thousand. He wishes to know what fault is found with them, "for I know they will catch, but yet less than any I have seen," and requests "Mr. Haidocke to procure clasps for Mr. Vice Chancellor's two great volumes, so that they may be chained, and stand as a fair ornament." He also speaks of the chains being so disposed "that they may not take away the sight and show of the books;—of John Smith, the maker of the chains;—the chain-man,"³ &c.

To the year 1711, at least, did this precaution against pilfering partially continue. A paper found in a copy of "Lock on the Epistles," of this period, thus enters into the subject. "Since, to the great reproach of the nation, and a much greater one of our holy religion, the thievish disposition of some that enter into libraries to learn no good there, hath made it necessary to secure the innocent books, and even the sacred volumes themselves, with chains—which are better deserved by those ill persons, who have too much learning to be hanged, and too little to be honest, care should be taken hereafter, that as additions shall be made to this library, of which there

¹ Hearne's Rel. Bodl. 26.—² Ibid. 102.—³ Ibid. 123.
137. 152. 167. &c.

is a hopeful expectation, the chain should neither be longer, nor more clumsy, than the use of them requires: and that the loops, whereby they are fastened to the books, may be riveted on such a part of the cover, and so smoothly, as not to gall or raze the books, while they are removed from or to their respective places. Till a better may be devised, a pattern is given in the three volumes of the Centur Magdeburg, lately given and set up. And forasmuch as the latter, and much more convenient manner of placing books in libraryes, is to turn their backs outwards, with the titles and other decent ornaments in gilt-work, which ought not to be hidden, as in this library, by a contrary position, the beauty of the fairest volumes is:—therefore, to prevent this for the future, and to remedy that which is past, if it shall be thought worth the pains, this new method of fixing the chain to the back of the book is recommended, till one more suitable shall be contrived.”^o

This period had not only introduced great variety in the styles of binding, but, from the increase in the number of books, and the consequent greater employment, a host of craftsmen also;—so numerous and important a body, as, in connection with the printers, to have influence enough to obtain the following Act of Parliament for their protection in the twenty-fifth year of Henry VIII. (A. D. 1533), which was not repealed till the twelfth of George II.

^o Papers on the Dark Ages, Br. Mag. x. 391.

“ Whereas by the provision of a statute made in the first year of the reign of king Richard III., it was provided in the same act, that all strangers repairing unto this realm might lawfully bring into the said realm, printed and written books, to sell at their liberty and pleasure. By force of which provision there hath come into this realm, sithen the making of the same, a marvelous number of printed books, and daily doth ; and the cause of making of the same provision seemeth to be, for that there were but few books and few printers, within this realm at that time, which could well exercise and occupy the said science and craft of printing ; nevertheless, sithen the making of the said provision, many of this realm, being the king’s natural subjects, have given themselves so diligently to learn and exercise the said craft of printing, that at this day there be within this realm a great number of cunning and expert in the said science or craft of printing : as able to exercise the said craft in all points, as any stranger in any other realm or country. And furthermore, where there be a great number of the king’s subjects within this realm, which live by the craft and mystery of binding of books, and that there be a great multitude well expert in the same, yet all this notwithstanding there are divers persons, that bring from beyond the sea great plenty of printed books, not only in the Latin tongue, but also in our maternal English tongue, some bound in boards, some in leather, and some in parchment, and them

sell by retail, whereby many of the king's subjects, being binders of books, and having no other faculty wherewith to get their living, be destitute of work, and like to be undone, except some reformation be herein had. Be it therefore enacted by the king our sovereigne lord, the lords spiritual and temporal, and the commons in this present parliament assembled, and by authority of the same, that the said proviso, made in the first year of the said king Richard the Third, that from the feast of the nativity of our Lord God next coming, shall be void and of none effect.

“ And further, be it enacted by the authority aforesaid, that no persons, resiant, or inhabitant, within this realm, after the said feast of Christmas next coming, shal buy to sell again, any printed books, brought from any parts out of the king's obeysance, ready bound in boards, leather or parchment, upon pain to lose and forfeit for every book bound out of the said king's obeysance, and brought into this realm, and brought by any person or persons within the same to sell again contrary to this act, six shillings and eight pence.

“ And be it further enacted, by the authority aforessaid, that no person or persons, inhabitant, or resiant, within this realm, after the said feast of Christmas, shall buy within this realm, of any stranger bourn out of the king's obeysance, other then of denizens, any manner of printed books, brought from any the parts beyond the sea, except only by engross, and not by retail, upon pain of for-

feiture of six shillings and eight pence, for every book so bought by retail, contrary to the form and effect of this statute. The said forfeitures to be always levied of the buyers of any such books contrary to this act, the one half of the said forfeitures to be to the use of our sovereign lord the king, and the other moiety to be to the party that will seize, or sue for the same in any of the king's courts, to be by bill, plaint, or information, wherein the defendant shall not be admitted to wage his law, nor no protection, ne essoin shall be unto him allowed.

" Provided always, and be it enacted by the authority before said, that if any of the said printers, or sellers of printed books, inhabited within this realm, at any time hereafter, happen in such wise to enhance, or encrease the prices of any such printed books in sale or binding, at too high and unreasonable prices, in such wise as complaint be made thereof unto the king's highness, or unto the lord chancellor, lord treasurer, or any of the chief justices of the one bench or the other, that then the same lord chancellor, lord treasurer, and two chief justices, or two of any of them, shall have power and authority to enquire thereof, as well by the oaths of twelve honest and discreet persons, as otherwise by due examination by their discretion. And after the same enhauncing and encreasing of the said prices of the said books and binding, shall be so found by the said twelve men, or otherwise, by examination of the said lord chancellor, lord treasurer and justices, or

two of them at the least, that then the same lord chancellor, lord treasurer, and justices, or two of them at the least, from time to come, shall have power and authority to reform and redress such enhauncing of the prices of printed books from time to time by their discessions, and to limit prices as well of the books, as for the binding of them. And over that, the offender or offenders thereof being convict by examination of the same lord chancellor, lord treasurer, or two justices, or two of them, or otherwise, shall lose and forfeit for every book by them sold, whereof the price shall be enhanced for the book, or binding thereof, three-shillings and four-pence, the one half thereof shall be to the king's highness, and the other half to the parties grieved, that will complain upon the same, in manner and form before rehearsed."

That the prices were thus fixed, will appear by the following extracts, which will also cast some light on the sums then charged for books and binding. A proclamation of Henry VIII.'s in May, 1540, relative to Grafton's Bible, then recently printed, sets the price at ten shillings unbound, and not above twelve shillings well bound and clasped.⁹ At the end of the "Booke of the Common Prayer," printed by Richard Grafton in folio, A.D. 1549, is this monition:—"the king's maiestie by the aduice of his most dere vnkle the lord protector, and other his highnes counsail, straightly chargeth, and commaundeth that no manner of per-

⁹ Lewis's Translations of the Bible, 137.

sone shall sell this present book unbound aboue the price of two shillynges and two pence. And the same bounde in paste or in bordes in calues lether not aboue the price of four shillynges the pece. God sauе the Kyng." Strype relates, that "Sir William Cecil, principal Secretary of State to king Edward, procured for Seres, a printer in St. Paul's Church Yard, in 1569, a licence to print all manner of private prayers, called Primers, as should be agreeable to the Common Prayer, established in the Court of Parliament, and that none other should print the same. And when printed, that by the lords of the Privy Council, or by the lord Chancellor, &c. the reasonable price thereof be set, as well in the leaves, as being bound in paste or board, in like manner as was expressed in the end of the Book of Common Prayer."¹

It may not be irrelevant here to notice the charge, as we think unjustly, against the early bookbinders, of wanton destruction of many choice and splendid MSS. Portions have frequently been found under the end-papers, on the backs, and even forming the whole of the interior lining or covers of early printed works, which has led to the accusation of the artists of that day having much to answer for on this head. How they became possessed of them has been shown at the period of the Reformation. That the bookbinder's share of the spoil was large is doubtless true, but we may reasonably suppose, that however ex-

¹ Johnson's *Typographia*, i. 543.

tensive, it did not consist of perfect works; but all more or less mutilated prior to their sale or grant. And even admitting them to have been so, the penalties attached to their diversion from any other purpose than total destruction, would, we apprehend, act upon their minds, and present an effectual bar to the books being even secretly disposed of.

We now proceed to the consideration of the Art in the seventeenth century, and are compelled at the commencement of it to state, that the manner of execution, and style of finish, had altered much for the worse. The old folios of this period possess none of the compactness and beauty observed in the bindings of the previous century. How far this may be attributed to the unsettled state of the country during the civil wars of Charles the First, the stern morality of the Puritans, and the reckless profligacy of the second Charles' reign, cannot for certainty be determined. That these circumstances had much influence cannot be doubted; for bookbinders, like other artists, lacking the patronage of the wealthy, have not much to stimulate them to greater exertion than the necessity of procuring the means of existence may demand. This state of the art continued throughout the whole of this century. The ponderous volumes of the old nonconformist divines, present little or no variety, being principally covered with an uniform brown calf, without ornamental exterior. Several bindings, however, of this period



Ancient Bookbinder and Assistant.

are thickly studded with gilt ornament on the back. Oaken boards had entirely disappeared, and a thick but flimsy pasteboard substituted, the bands, which were of hempen cord being laced in holes pierced through them. A gilt ornament is sometimes seen on the sides : it is of a peculiar character, generally a diamond-shaped tool in the centre, and sometimes smaller ones in each corner. They are badly executed, being dull impressions of an ornament, displaying no taste, and having none of the sharpness of finish necessary to give a good effect.

They continued to beat their books, as in the previous century, in order to produce as much solidity as possible. Of this peculiarity, a poet, Clement Barksdale,* has left us the following evidence in his address

“TO THE BOOK-BINDER.

Has my muse made a fault ? Friend, I entreat,
Before you *bind* her up, you would her *beat*.
Though She's not wanton, I can tell
Unlesse you *beat* her, you'll not *bind* her well.”

This characteristic of their bindings is also further shown in the annexed engraving of an ancient book-binder, from an old print; who, though seated and taking his ease more than is now the practice, appears to be hammering away at the book on the stone with a firm determination of doing justice to this depart-

* Nympha Libethris, or the Cotswold Muse, 96.

ment. The operation of sewing is also here displayed, as also in the foliage introduced into the print, the appearance of the books of the period. The justice of attention to the sewing and backing of their books must, however, be given to the craftsmen of this century, as may be seen in some of the volumes in St. Paul's Cathedral library, London, which, where preserved from damp, are as firm in this particular as the day they were executed.

But, in speaking generally, we must not detract from the merits of a few of the more talented artists of this degenerated period of our history; establishing the opinion before expressed, that where patrons were found, workmen would not be wanting equal to the task of executing binding in a superior manner. It is evident that in a few instances a considerable degree of splendour was bestowed, and vast wealth expended on the exterior of the books of some of the lovers of literature. One of these, *bishop Cosin*, not only lavished great treasure on, but perfectly understood the various manipulations required in the execution of binding. On October 18, 1670, he expressly enjoins that “the bookes should be all *rubb'd once a fortnight* before the fire to prevent moulding.” In another letter, in the year 1671, to his secretary, *Stapylton*, he says, “You spend a greate deale of time and many letters about Hugh Hutchinson, and the *armes he is to set upon my bookes*. Where the backs are *all gilded over*, there must bce of necessity a piece of *crimson leather* set on to receive the stamp.

and upon all paper and parchment bookees besides. The like course must be taken with such bookees as are rude and greasy, and not apt to receive the stamp. The impression will be taken the better if Hutchinson shaves the leather thinner." With such knowledge of the practice of bookbinding, we cannot be surprised at the bishops love of luxury in the coverings of the choicest works, which the following document attests.

To the Right Rev. Ffather in God, John Ld.
Bp. of Durham.

For one booke of Acts bd. in white lether	0	2	6
For binding the Bible and Comon Prayer and double gilding and other trouble in fitting them	3	0	0
Pd. for ruleing the Comon Prayer, . . .	0	8	0
The Total	3	10	6
			<hr/>

This, taking into consideration the value of money at the time, appears to have been the very height of luxury and extravagance ; but is nothing when compared with the other ornament lavished on the above Bible and Prayer.

" Receivd the 31 of January, 1662, of the Right Reverend Father in God, John, Lord Bishop of Durham, by the hands of Myles Stapylton, the summe of one hundred pounds, being in *part of payment* for the plate and workmanship of the covers of a Bible and Common Praier Booke. I say received by me, M. S. Houser, Goldsmith, 100l."

This munificent patron of the art does not appear to have confined his endeavours to the embellishment of his own library, and the books of the church over which he presided, but to have influenced by his example the patronage of others. In a letter bearing the date of Dec. 8, 1662, from Mr. Arden to the bishop's secretary, Myles Stapylton, is this passage. "My Lord desires you to bespeake *black leather cases*, lined with green, for the *silver and gilt bookes*, for the countess of Clarendon to carrie and keepe them in." ¹

With support such as this, though the art degenerated so far as the general bindings of the country may be taken into account, a degree of splendour and taste was preserved by a few, which still kept up the remembrance of the talent of previous workmen, with many of their valuable receipts and directions; all which, tended ultimately to the production of a generally improved taste in the eighteenth, and, ultimately, to the perfection of the nineteenth century. To the consideration of this important result, we shall, in the seventh chapter, devote our attention.

¹ Dibdin's Bib. Dec. ii, 503.

CHAPTER VI.

FOREIGN BINDING AND BINDERS, FROM THE INVENTION OF PRINTING, TO THE INTRODUCTION OF MODERN BOOKBINDING.

THE invention of the Art of Printing appears to have taken place at that happy period, when, from circumstances, it became of more inestimable value to posterity by preserving many of the noblest productions of past ages, than perhaps a century later it would have been possible for it to have achieved. For, while in its infancy, the fall of Constantinople, and consequent dispersion of the extensive and magnificent library of the Byzantine emperors, in affording great facilities to the early printers of the continent, multiplied the most important classic treasures, many of which existed in single copies, and of which the accident of a moment might have deprived the world for ever. Of the one hundred and twenty thousand manuscripts which are said to have disappeared,* a valuable portion of them being

* Gibbon's Rome.

deposited in Italy, thus successively issued from the presses of the early professors of the art, and are preserved to our times by the sturdy integrity and firm workmanship of contemporary bookbinders.

The greater extent of printing on the continent, which rapidly spread to the principal cities of Germany and France, afforded the utmost facility to foreign bookbinders, who consequently increased in number as the commerce in books became extended; and eventually spread themselves over most other countries, many of them permanently settling in England.^b In commenting on the workmanship of these early settlers, we have, in the previous chapter, also entered into the *detail* of the bindings of the continent also. A repetition of those facts here becomes unnecessary. We shall, therefore, confine our remarks to what is exclusively continental, during the same period.

In the public libraries of the continent, German, French, Italian, Dutch, Spanish, &c. many early specimens of binding, richly studded with gems, or ornamented with silver and gold, still exist, and in the less pretending ones of the monasteries, the oaken boards of the fourteenth century covered with vellum, are found attached to a great number of the books, and still in a good state of preservation.^c

It is, however, on the continent, as in our own

^b See Act. Richard III. c. ix. sect. xii.—^c Dibdin's Bibl. Tour, 3 Vols.

country, to the patronage of the wealthy and lovers of books, that we have to attribute the successful operation of the best workmen. And in the history of their libraries, and the specimens remaining, can we alone trace the progress of the art. To Corvinus, king of Hungary, who died, A.D. 1490, must be assigned the honour of the rank, as first patron of the period of which we are now treating. His library consisted of not less than fifty-thousand MSS. and books,^a preserved in the most costly bindings, and embellished with all that ingenuity could suggest or wealth procure. This splendid collection was preserved in a vaulted gallery. The books were chiefly bound in brocade, protected by bosses and clasps of silver, or other precious metals. Bonfinius, referring to them, says, ‘*cultus librorum luxuriosissimus.*’ The destruction of the library took place in 1526, when Solyman II. laid siege to Buda. The city was taken by assault, and the library with all its exquisite appurtenances, became a prey to the rapacity of the Turkish soldiers. The bindings torn from the books, which they protected, were stripped of the costly ornaments with which they were enriched.^b Obsopaeus relates, that a MS. of the *Ethiopics* of Heliodorus, was brought to him by an Hungarian soldier, which he had acquired with many others in the pillage, and had preserved as a prize, from the cover retaining

^a Warton's Eng. Poetry, iii. 243.—^b Dibdin's Bib. Dec. ii. 461.

some marks of gold and silver workmanship. Cardinal Bozmanni offered for the redemption of this inestimable collection, two hundred thousand pieces of the imperial money, but without effect.^f The MSS. were either burnt or torn to pieces, and of the whole collection, scarcely three hundred are now known to exist. Several of these are still preserved in the imperial library of Vienna, but of their original splendour little remains. The public library at Stuttgart, also possesses a MS. St. Austin on the Psalms, covered with leather, and the original ornaments of the time of Corvinus, if not belonging to his library. It is much faded, but the fore edges preserve their former gilt stamped ornaments.^g There are also in the public library of Brussels, two magnificent MSS. which once graced the library of Corvinus. The first is a Latin Evangelistarium, written in letters of gold upon the most beautiful vellum, and not inaptly called THE GOLDEN Book. It had become the property of Philip II. of Spain, who kept it in the Escorial library, under lock and key; and it is said to have been formerly shown to strangers with great ceremony, and by torch light! However this may be, 'tis a precious morceau, and of finished execution.^h Gibbon awards nearly the same honour to a copy of the Pandects of Justinian, taken at Pisa, in the year 1406, by the Florentines, and still pre-

^f Warton, iii. 243.—^g Dibdin's Bib. Tour. ii. 31.—
^h Dibdin's Bib. Dec. iii. 157.

served as a relic in the ancient palace of the republic. According to Brenckman, they were *new bound in purple*, deposited in a rich casket, and shown to curious travellers by the monks and magistrates, bare-headed, and with lighted tapers.¹

While the art thus flourished in Hungary, it was equally successful in Italy, and found in those distinguished patrons of literature, the Medici family, steady supporters, and liberal aid. The specimens of binding still existing, show that no expense was spared by the Italians of the fifteenth century, in the embellishment of their books. The manuscripts, &c. collected by Piero de Medici, are highly ornamented with miniatures, gilding, and other decorations, and are distinguished by the *fleur de lis*. Such as were acquired by Lorenzo, called the father of literature, are also finished with great attention to elegance. They are not only stamped with the Medicean arms, but with a laurel branch, in allusion to his name, and the motto, **SEMPER.**^k

To the above liberal patrons of literature, may be added many of the nobles and clergy of Italy, who were profuse in their love of embellishment; but none more so than the celebrated Cardinal Mazarin. His library in his palace on the Quirinal hill, at Rome, consisted of 5000 well selected volumes, “bound by artists *who came express from Paris.*”^l

¹ Gibbon's Rome, v. 381.—^k Roscoe's Lorenzo de Medici, ii. 59.—^l Dibdin's Bib. Dec. ii. 495.

Angelus Roccha, in his Appendix to the *Biblia Apostolica Vaticani*, 1599, speaking of the library of cardinal Launcelot, says, it was "celebrated as well on account of the quantity of books, (for there are seven thousand volumes), as for the beautiful binding, their admirable order, and magnificent ornaments." Cardinal Bonelli's library was also celebrated as being "illustrious for the richest bindings of books."[■]

There is every reason to believe that a great portion of these bindings, as in the case of the books of cardinal Mazarin, were executed by workmen of other countries. The Italians, though furnishing the greater part of the designs, seen in most ornamental works of the fifteenth and sixteenth centuries, do not appear to have ever done much for the art of bookbinding.

The libraries of Germany are particularly rich in bindings of almost every age and description. Some specimens have been referred to in a previous chapter, and others, of which we shall hereafter speak, attest the patronage bestowed on the art. But though we have no name, on record, as being, *par excellence*, lovers of book embellishment, the numerous specimens of early binding still preserved in Austria, Bavaria, &c., sufficiently attest a long list of patrons in the successive rulers of the various kingdoms and states. In the Imperial library of Vienna, an early specimen exists on a fine "Evangelistarium." The binding is

[■] Dibdin's Bib. Dec. ii. 492.

of the time of Frederick III. (the middle of the fourteenth century.) The ornaments consist of a lion's head in the centre of the board, surrounded by golden rays, and having a lion's head in each corner of the square. An arabesque border surrounds the whole, giving an effect both splendid and tasteful.* Other specimens might be given to a great extent, both in this, and the Emperor's private library, in all the varieties of silver, velvet, silk, calf, and vellum.

A MS. office of the Virgin, in the public library at Munich, bears witness to the custom of binding books in silver, with coloured inlaid ornaments, up to the year 1574, which date it bears. This library contains also four splendid folio volumes, the text of the "Seven Penitential Psalms," which exhibit extraordinary proof of the skill of the writer, musician, painter, and bookbinder. Of each of these artists, there is a portrait. The name of the binder is Gaspar Ritter. The books are bound in red morocco, variegated with colours, and secured with clasps. Every thing about them is square, firm, and complete, and stamps Gaspar Ritter as one of the most skilful artists of the sixteenth century.^o

In the public libraries of Augsbourg, Stuttgart, Landshut, &c., similar specimens, clothed in every variety of material, might be adduced in further illustration. In the University library at Leyden, celebrated throughout Europe, most of the books are

* Dibdin's Bib. Tour, iii. 274.—^o Ibid.

bound in fine white vellum, and decorated with considerable taste and splendour.^P

Germany, on the invention of printing, presented a wide field for the binder; and the artists of that time do not appear to have neglected the opportunity presented them. It is more than probable that they were also the inventors of the stamped calf and vellum bindings, which have been fully discussed in an earlier portion of the work. That they would not be slow in applying the knowledge of impression printing had more particularly brought to notice, may be inferred, and the covers of many of the volumes printed in Germany at the commencement of the fifteenth century, by the beautiful stamped devices with which they are embellished, strongly establishes the fact. Further than this, the German binding possesses no peculiarity, and up to the present time, the artists of that country have never formed what can be called a national binding.

From the great extent of country, they have, however, always been numerous. They had at a very early period laws for their guidance, and the tax, or price for binding books, in sheep-skin, vellum, &c., settled by the magistrates. Throughout the electorate of Saxony, the prices in sheep were, for large folios, one guilder or florin, three grosses; common folio, one florin; large quarto, twelve grosses; common quarto, eight grosses; large octavo, five grosses;

^P Savage's Librarian, i. 89.

common octavo, four grosses; duodecimo, three grosses.⁴

These facts, although not presenting us with any particular feature in the history of the art of book-binding, are interesting as showing the general spread of talented artists at an early period over the several countries of Europe, and that it was very successfully practised during the fifteenth century admits of no doubt. This will be more fully confirmed by the account of French bookbinding, to which we shall now direct our attention.

To the steady and continued support of her kings and wealthy men may be attributed the high position the binders of France for a long period occupied, over those of England or any other country. During the sixteenth century, their superiority was so generally acknowledged that they were sent to most parts of Europe; in the libraries of which, many of their works still remain to prove the judgment of their employers and the skill of the workmen. Of these early French artists, Gascon, Desseuil, Pasdaloup, and Derome, occupy the first rank.

Gascon is considered to have been the workman who bound a considerable part of the libraries of Henry II., and Jean Grolier, of which we shall soon speak, and which will attest the merit of the workman. Desseuil equally excelled in the fineness of his binding, and the elegance of his finishing. Pasdaloup and Derome were contemporaries, and fully bore

⁴ Fritsch's Dissertation on Bookbinders.

out the reputation of their predecessors. The estimation the bindings of the above artists are held in, is fully shown by the prices given for many works of small value from their being coated by them. Of the latter, may be cited the notice upon Goutard, wherein the editor explains himself thus, "The books described in this Catalogue are in part bound by the celebrated Derome, the *phœnix of binders.*"^r And we may evidence a copy of "Geyler's *Navicula Fatuorum*," sold by auction in London, for 42*l.* from being coated in a Grolier binding,^s which book may be bought for a ducat on the continent.

The royal library at Paris contains innumerable specimens of the bindings of the period we have above alluded to. Previous to the reign of Francis I., the greater portion of the books were covered with velvet, brocade, &c., of various colours and patterns. Some still remain, among which, a MS. *Ptolemæus*, in blue velvet with a running yellow pattern, now nearly worn away. Here, also, may be seen many of the old monastic bindings in ivory, gilt, or brass, studded with cameos and precious stones, and covered with figures of all characters and ages.^t Many of the books of Francis I. were bound in leather in a plain manner, differing only according to the tastes of the countries in which they were bound. With the exception of presents and a few favourite works, all his Latin, Italian, and French MSS. were bound with

^r *La Reliure, par Lesne.* 113.—^s Dibdin's Bib. Dec. ii. 115.
—^t Dibdin's Bib. Tour, ii. 59.

black leather. His Greek manuscripts were partly bound in the oriental style, and partly in various coloured moroccos, with smooth backs and no bands. They are distinguished by the arms of France, and the insignia of the monarch (a Salamander and the letter F) stamped in gold or silver. Some of the books have dolphins added, which indicate the book to have been bound in the time of Francis, not for the king, but for the dauphin.*

Under the reign of Henry II. it is that we must look for the celebrated bindings of France in the sixteenth century. The books bound for this prince are also distinguished by his insignia, or by his initial H, interwoven with that of his mistress, Diana of Poitiers, ID. We have stated that *Guscon* was the probable binder of a portion of Henry II.'s books, of which about eight hundred volumes now remain in the royal library, bound in a similar manner. But the credit of the advances the art made at this period must be attributed to Jean Grolier, born at Lyons, in 1479, Chevalier, Viscount d'Aguisi, and one of the four treasurers of France. This learned and distinguished man was a zealous protector of the arts, and possessed the most beautiful library, in respect to size, condition, and binding, at that time known. Though a kind of leather called morocco had been in use in the time of Francis I., it is very doubtful whether the skin dressed as we now see it was applied as a cover for books previous to its introduction by

* *Essai Historique sur la Bibliotheque du Roi*, 24.

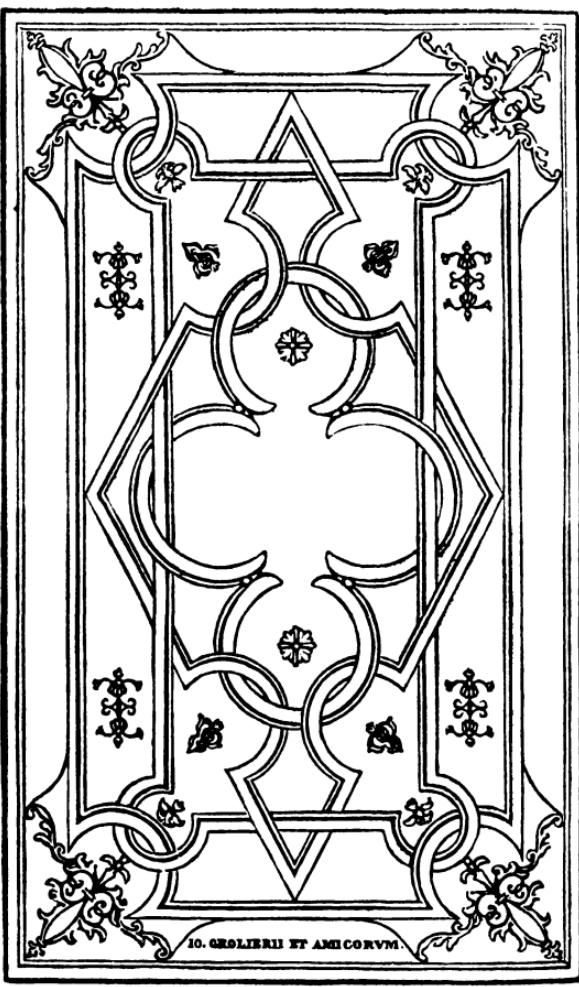
Grolier. Many of his books exist in the libraries in France and this country, and the estimation in which they are held has been noticed. The beauty, delicacy, and excellent taste of the ornaments are well known and acknowledged. *Vigneul de Malville*,¹ says, "The books were gilt with a delicacy unknown to the binders of his time; he was so much the amateur of good editions, that he possessed all those given by the Alduses, of whom he was the friend: he had them bound in his own house, under his own eyes, and he disdained not at times to put his own hand to them."

Of Grolier's books many are to be found in Mr. Cracherode's collection in the British Museum. They are well and firmly bound. The simplicity of the ornamental work is their great charm. A succession of plain lines forming divers compartments executed with much precision, and attention to proportion, appears nearly on the whole. These designs he is said to have composed himself in moments of leisure when he forsook the more serious cares of his office. They all bear the inscription—

A. J. GROLIER ET AMICORUM,

showing that he wished his books to be used by his friends as well as himself. Of the care his friends took of them, the still perfect state of the bindings amply testifies. Nor must we omit the need of praise to *Gascon* or whatever other binders he employed,

¹ *Mélanges de Littérature.*



Specimen of the Style of Binding of the Books of the
Chevalier Grolier.

for bindings evidencing a greater care for the integrity of a good margin, and beauty of finish, of no time or country, are to be met with. Subjoined is a specimen of the ornamental side cover of a folio "Chronicle of Freculphus," 1539, from the collection of the late Mr. Heber. It is in brown calf. The author's name occupies the centre.

Grolier is considered to be the introducer of lettering pieces between the bands of the back.

How far the taste of Grolier may have influenced, or whether he had any direction in the binding of the books of Henry II. to which we must now return, is not satisfactorily determined. The most splendid portion of the bindings of Henry, are those from the fine library at *Anet*, erected by Diana of Poitiers, distinguished by the interlaced H's and D's. If not directed by Grolier, she appears to have been influenced by the splendour of his library; and with her unbounded love for books, the wealth she could bestow, and her influence over the monarch, we need not wonder at the beauty of the bindings belonging to her library. The embellishments are in good taste, being, like Groliers, principally composed of lines, interwoven with the initials before referred to, bows, quivers, arrows, and the crescent, emblems of the goddess Diana, whose name she bore.

Of the elegance of some of her books, the binding of a copy of the French version of the "Cosmography of Sebastian Munster," in the public library at Caen, in Normandy, remains as evidence. It is as splendid

as it is curious. It contains two portraits of Henry II., and four of Holofernes on each side of the binding. In the centre of the sides are the usual ornaments above referred to, but on the back are five portraits of Diana, in gilt, each within the bands. Two of them are faced by portraits of Henry. There are also on the sides two pretty medallions of a winged figure blowing a trumpet, and standing upon a chariot drawn by four horses, with the date 1553.*

It is believed Diana suggested that one copy of every book to which the royal privilege extended, should be printed upon vellum and handsomely bound, as ordered by an edict of Henry II. in 1556. Of this date the binding of a "MS. L'Historie Romaine," No. 6984, in the royal library, is of extreme beauty. The lines in all directions, principally circular, are almost innumerable, and well executed. The date 1556, is impressed on the outside.^x

Contemporary with Grolier, another patron, of the name of Maioli, is well known, from his bindings, though of his personal history no traces are left. The decoration of his bindings also consists of designs in compartments, and bear his name like Grolier's, thus—

THO MAIOLI AMICORVM.

An Italian edition of the "Psalms of David," 4to. 1534, once belonging to the library of *Maioli*, formerly possessed by Mr. Singer, bears on the reverse side of the binding the following motto—

* Dibdin's Bib. Tour, vol. i. 339 — ^x 1bHL

“INIMICI. MEI. MEA. MICHI. NON. ME.
MICHI.”

The royal library of France exhibits but few bindings of the time of Francis II. They are marked with an F. and II. Some of them have the addition of the initials of Charles IX. from which circumstance it appears likely the books were only partly finished at the death of Francis. Those marked with the cipher Charles IX. are more numerous, impressed with two C's reversed, and interwoven, sometimes with K. surmounted by a crown.*

Under the reign of Henry IV., the celebrated historian and bibliographer, James Augustus De Thou, was master of the royal collection. Under his direction many of the books were bound, principally in red morocco, and impressed with the royal arms of France, and the initials of the king. On some we read the following inscription—

“HENRICI III. PATRIS PATRIÆ VIRTU-TUM RESTITUTORIS.”

as on the MS. Bible of Charles the Bald, which is highly ornamented with fleur de lis of gold, crowns, &c.*

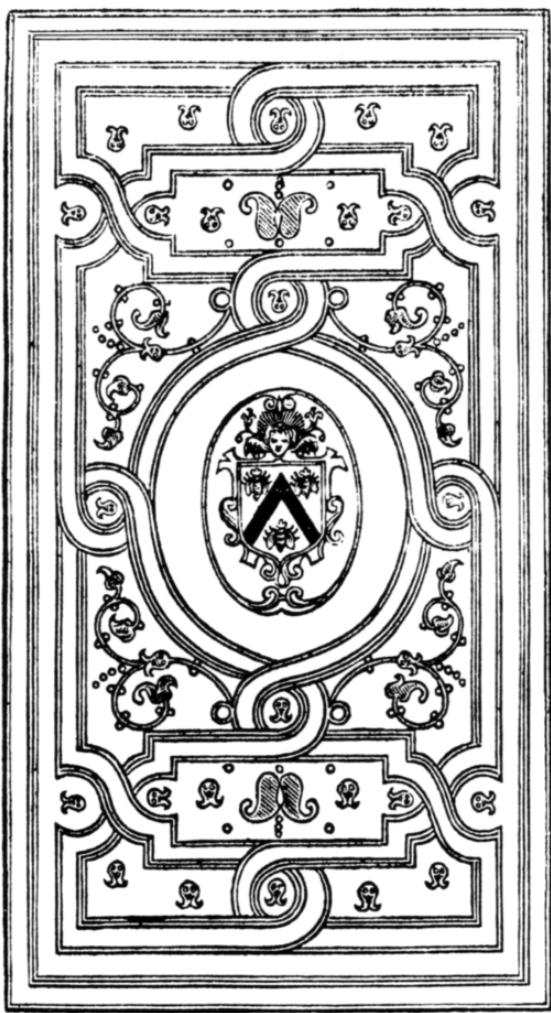
De Thou also collected a large library of his own, sparing no expense in procuring copies of the most celebrated works of the learned. Jacob^b says his library contained more than eight thousand very rare

* Dibdin's Bib. Dec. ii. 476.—^a Horne's Int. i. 299.—
^a Hist. sur la Bibliotheque du Roi, 35.—^b Traite de Biblio-theque, 519.

the binding of which, according to Bullialdus, cost 20,000 crowns. De Thou's favourite colour was red, principally morocco. The monogram he adopted was composed of the initials ADT interwoven. Others represent an A between two G's as in the Cracherode copy of the Libanius of 1606, in the British Museum, which has on the sides the arms of De Thou and those of some other person.^c This connection of arms appears on several of his books. His bindings in general are not so ornamented as those of Grolier, but when they are found, on some of his better books they will bear comparison with those of that illustrious collector. Earl Spenser possesses some fine specimens; and their estimation by collectors may be gathered from the sale of "Salvianus on Fishes" for £30 10s, on the disposal of the late Mr. Edward's library, a book by no means scarce.^d The engraving is from an arabesque binding of a "Stephens Greek Testament," in the library of Earl Spencer.

To these distinguished patrons of binding we may add the names of *Colbert* and *Hoyen*, of *La Valliere* and *Lainoignon*. The two great bibliographers of the time were *Jerome Bignon* and *Gabriel Naude*: the former, librarian to the king, the other to Cardinal Onagarius. The Cardinal's library was next to the royal collection in extent and magnificence. Jacob says it was open every Thursday, from morn till and curious volumes, all bound in morocco or calf gilt;

^c Dibdin's Bib. Decameron ii. 483.—^d Ibid. ii. 484.



Lse. sc

Binding of a Stephens' Greek Testament, from the
Library of the President De Thou.

night. In his time there were about 400 MSS. in folio, bound in virgin morocco and covered with borders of gold. The president Longueil could boast, in Jacob's time, of an admirable collection of books, which he was increasing every day, and the library of Nicolas Chevalier formed the basement and first stories. "This library," says Jacob, "is one of the most excellent in Paris for the BINDING, which is all in calf, covered with fleur de lis, and gilt upon the edges. There is also some MSS. very rare, covered with velvet." He tells us that in the library of *Claude d'Urfe*, in the castle of Abbattie, there were more than 4600 vols. and among which were 200 MSS. upon vellum, covered with green velvet. In the royal library are several works from this collection, bearing his arms, and splendidly attired. The library of the Arsenal also contains some. Many other libraries existed. Guy Patin had 6000 volumes. The Du Puys about 8000 volumes. Jacques Ribier nearly 10,000. Cardinal Seve had his 6000. The duke de la Valliere, a little beyond the middle of the seventeenth century, had already 20,000 vols.^e From the time of Louis XIII. the books in the royal library ceased to be distinguished by the different reigns.

In France, as we have shown was the case in this country, the early printers exercised the art of book-binding also. Chevallier, in his "History of Printing," states, that Eustace, Eve, and P. le Noir, each styled

^e Dibdin s Bib. Dec. ii. 494.

themselves binders to the university, or the king. Jean Canivet also styled himself, in the year 1566, *Relegator Universitatis*¹. Louis XIV., by an edict in 1686, separated the corporation of binders from the printers of books in the university of Paris; but by the same edict, the binders were always rated and reputed of the number of the agents of the university, and enjoyed in this quality the same privileges they had done before. Two French binders, named Galliard and Portier, were celebrated for improvements about the end of the sixteenth century.

Were further proof of the distinguished talent of the early French bookbinders necessary, many other specimens might be produced. Sufficient has been done to substantiate this point; but frankly as we have admitted the superiority of the French bookbinders over all others, during the period we have been treating of, it will be seen that in the following century they began to retrograde, and their bindings to possess no distinctive character. They neglected the illustrious example set before them by their predecessors, whilst the binders of another country, profiting by it, bestirred themselves in the acquisition of the true principles of the art, which, though progressing slowly for a time, eventually led to that degree of excellence now exhibited in English binding, which for some years was not, if now, equalled, certainly not surpassed, by any other country in the world.

¹ Dibdin's Bib. Dec. ii. 482.

CHAPTER VII.

MODERN BOOKBINDING.

FOR some years no sensible progression or improvement in bookbinding succeeded the period embraced in the three previous chapters of our inquiry. The art, if not retrograding further, still made no advances, and no names, either as patrons or practitioners, in this country or France, occur to redeem the end of the seventeenth and beginning of the eighteenth century from being characterized a dark portion of its history. But a new and brilliant era was about commencing, that was to give a stimulus to the efforts of the English binders, and, by the influence of example, to considerably increase the number of patrons of the art. A taste for the collection and establishment of large and valuable libraries began to develope itself soon after the commencement of the eighteenth century. This materially influenced the sale of books, and incidentally every branch connected with them. New works more frequently appeared, and, from the

increased demand, in the course of some years, old ones, that had lain dormant in small collections, or the secluded libraries of convents on the continent, were submitted to public competition. As a consequence, from the greater number of books, binding began to revive, and by the successive efforts of many intelligent and talented professors of the art, attained a perfection in Great Britain, not equalled by the most splendid efforts of the best days of French book-binding.

The first and most distinguished of the collectors of the eighteenth century, was Harley, earl of Oxford, whose fine library, now in the British Museum, attests his spirit as a collector, and his munificent patronage of every thing connected with literature. And when we consider the numerous other patrons of the book-trade, at this time forming collections, we need not feel surprise that the eighteenth century, presenting, as it did, so extensive a field for the talent and energy of the British bookbinder, was productive of the most satisfactory results.

The books in the Harleian collection are principally bound in red morocco, presenting but little variety in the style of finish. They are what is termed respectably and soundly bound, with a broad border of gold round the sides, some with the addition of a centre ornament; the fore edges of the leaves are left plain, and the end-papers are Dutch marble. The artist by whom they were bound is not known.

This description furnishes a fair specimen of the

general style of binding till near the close of the eighteenth century. Materials, of course, differed, but morocco, russia, and brown calf, were the principal substances. The art may be said to have progressed more in the forwarding, or early stages, than in the finishing, for it must be confessed, that the selection of their tools for gilding were not often chosen with the best taste; birds, trees, ships, &c., being indiscriminately applied to the backs of books, whose contents were frequently diametrically opposite to what the ornament selected would lead any one to imply. But we must except a few of the bindings of the period, which evidence better taste. The late Mr. Hollis had his books decorated in a singular manner. He employed the celebrated artist Pingo to cut a number of emblematical devices, as the caduceus of Mercury, the wand of *Aesculapius*, the cap of liberty, owls, &c. With these the backs, and sometimes the sides of his books, were ornamented. When patriotism animated a work, he adorned it with caps of liberty, and the pugio or short sword used by the Roman soldiers; when wisdom filled the page, the owl's majestic gravity indicated the contents; the caduceus pointed out eloquence; and the wand of *Aesculapius* was the signal for good medicines.*

The bindings of Oxford and Cambridge, about a century ago, continued to be celebrated for their superior workmanship, and are held in high estimation by

* Horne's Int. ii. 306.

several modern collectors. The characteristics of the bindings of which we are now speaking, are a peculiar firmness and improved taste of finish. They are in plain calf, with bands, and marbled edges, the spaces between being filled up with gilt tooling.

The middle of the eighteenth century witnessed the introduction of the *sawn back*, whereby the bands on which the book is sewn, were let into the backs of the sheets, and thus no projection appears, as is seen in all bindings of a previous date. Where it was first used is not known, but it is considered the Dutch binding first gave the idea. Although it was adopted by many of the English and French binders with repugnance, it became fashionable. Bands, or raised cords, were soon only used for school books, which species of binding is now universally known as *sheep bands*. The general kind of binding now, up to the end of the eighteenth century, was what is termed *calf gilt*, being done almost all to one pattern, the sides marbled,^b the backs being brown, with coloured lettering pieces, and full gilt. Open backs had been little introduced, and the backs of the books were made remarkably stiff, to prevent the leather from wrinkling when they were opened.

The artists of the earlier part of the period of which we have been treating must have been numerous, but few are known. Two German binders, of the name of

^b On the invention of this process great caution was used to keep it secret, and books were obliged to be sent to the inventor to be marbled at a high price.

Baumgarten and Benedict, were of considerable note, and in extensive employment in London during the early part of this century.^c Who the distinguished parties at Oxford were has not been recorded, but a person of the name of Dawson, then living at Cambridge, has the reputation of being a clever artist,^d and may be pronounced as the binder of many of the substantial volumes still possessing the distinctive binding we have before referred to. Baumgarten and Benedict would, doubtless, be employed in every style of binding of their day, but the chief characteristics of their efforts, are good substantial volumes in russia, with marbled edges.

A later artist, and one to whom, perhaps, may be attributed the first impulse given to the improvements which have been introduced into bindings, was Mr. John Mackinlay, one of the largest and most creditable binders in London of the period of which we are now treating. Several specimens of his, in public and private libraries, remain to justify the character given of him ; and of the numerous artists that his office produced, many have, in later days, given good proof that the lessons they received were of a high character.

This century introduced a total change in the aspect of bookbinding, and, by the taste, ingenuity, and efforts of one man, Roger Payne, saw realized all the beauty of the French binding of the times of Grolier and De Thou. This individual, after passing his early

^c Dibdin's Bib. Decameron, ii.—^d Hartshorne's Book Rarities of Cambridge, 18.

years at Eton with Pote the bookseller, came to London, and was, some time about the years 1766—70, fixed as a binder near Leicester Square, by the late Mr. Thomas Payne, the eminent bookseller, then living at the Mews Gate. His great taste in the choice of ornaments, and judicious application of them, soon procured him numerous patrons among the noble and wealthy; and had his conduct been equal to his ability, great as were his achievements in the art, it is hazardous to conjecture how much further he might have benefitted it, as well as himself. His books are not so well forwarded as it has been the fortune of the present day to witness. His favourite colour appears to have been olive, which he called *Venetian*. His ornaments were the great boast of his bindings. They were chaste, beautiful, classical, and most correctly executed; the sides being the field in which he shone most conspicuously. The ornaments of his backs, and his mode of managing bands, were peculiarly his own, and books executed by him are quickly discovered by these characteristic marks. A Glasgow *Aeschylus*, folio, 1795, in earl Spenser's library, which contains many specimens of his binding, is considered to be the *chef d'œuvre* of his workmanship. Of the style and quantity of work employed, the following bill, delivered with it, will show, and also exhibit a curious specimen of his *style*.

“ *Aeschylus Glasguae, MDCCXCV Flaxman Illustravit.* Bound in the very best manner, sew'd with strong Silk, every Sheet round every Band, not false Bands; The Back lined with Russia Leather, Cut Exceeding large; Finished in the most

magnificent manner. Em-border'd with ERMINE expressive of The High Rank of The Noble Patroness of The Designs, The other Parts Finished in the most elegant Taste with small Tool Gold Borders Studded with Gold ; and small Tool Panes of the most exact Work. Measured with the Compasses. It takes a great deal of Time, making out the different Measurements; preparing the Tools; and making out New Patterns. The Back Finished in Compartments with parts of Gold studded Work, and open Work to Relieve the Rich close studded Work. All the Tools except Studded points, are obliged to be Workt off plain first—and afterwards the Gold laid on and Worked off again. And this Gold Work requires Double Gold, being on Rough Grain'd Morocco. The Impressions of the Tools must be fitted and cover'd at the bottom with Gold to prevent flaws, and cracks 12 12 0

Fine Drawing Paper for Inlaying The Designs
5s 6d. Finest Pickt Lawn Paper for Interleaving
The Designs 1s 6d. | 1 yd & a half of silk 10s 6d.
Inlaying the Designs at 8'd each—32 DESIGNS

1. 1. 4.	1	19	0
Mr. Morton adding Borders to the Drawings	1	16	0
<hr/>			£16 7 0

He continued, with varied success, arising from his habits of intemperance, which will be more particularly referred to in the biographical chapter, till the year 1797, on the 20th of November, in which he breathed his last.*

Though Roger Payne's career had not been successful, so far as he was personally concerned, it had the effect of benefitting the whole race of English bookbinders. A new stimulus had been given to the trade, and a new and chastened style introduced among the more talented artists of the metropolis. The unmeaning ornaments we have before alluded to

* Dibdin's Bib. Decameron, ii. 511.

were discarded, and a series of classical, geometrical, and highly-finished designs adopted. The contemporaries of Roger, Kalthoeber, Staggemier, Walther, Hering, Falkner, &c. exerted themselves with a generous rivalry to execute the most approved bindings, and the efforts of succeeding artists in the persons of Charles Lewis, Clarke, Fairbairn, Smith, &c. have brought the art to the degree of perfection we now see exhibited upon almost every book having any pretension to good binding. The nineteenth century thus witnessed the advance of the art in elegance and elasticity, which no other period previously had developed. Whatever was good in the workmanship of early times was now sought to be revived, and every thing that could be made available, both as regarded variety and superior execution, embraced. Solidity, so much estimated in old bindings, was combined with an elasticity and freedom by means of the open back, which the works of the ancients do not possess. And when to this we add the elegance which modern binding displays, without disparagement to their talent, the palm must be accorded to the modern bookbinder.

A taste, also, for the revival of binding in materials used in the fifteenth and sixteenth centuries soon developed itself. Velvet and silk were reintroduced; the former, from the difficulty experienced in lettering properly, has not been so general as the

latter, which is now very extensively adopted for a certain class of books. Modern velvet bindings, however, have been introduced into many libraries, among which may be named the collection of his late Majesty George III., the library of York Minister, earl Spenser, &c.

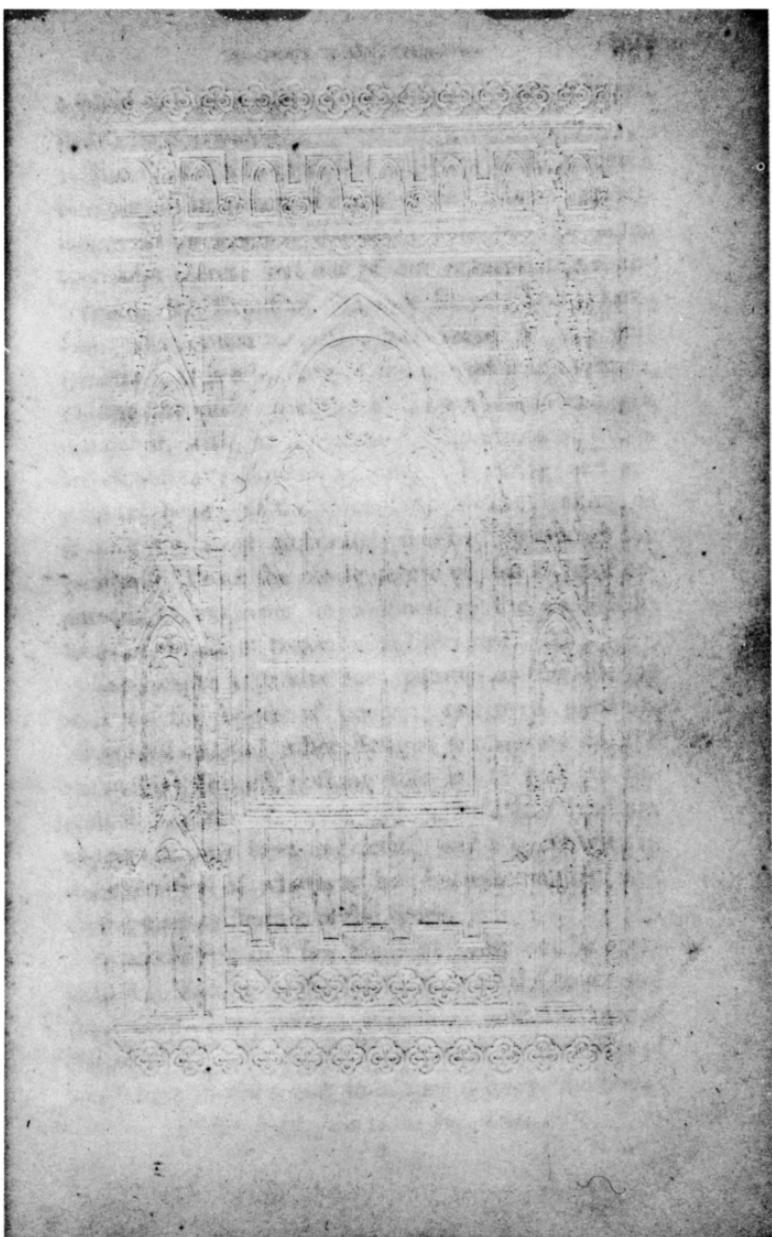
A style called the Etruscan was also invented by Mr. John Whittaker, and successfully practised by him. This consisted of the execution of designs on the books in tints instead of a series of gold ornament. Castles, churches, tented fields, gothic and arabesque compartments, were executed in their proper colours, and a very unique effect produced. The library of earl Spenser contains a copy of Wynkyn de Worde's "Art and Craft of Living and Dying Well," folio, 1503, bound in this style. The sides are embossed by the device of the printer, projecting to nearly one quarter of an inch. The coat is russia, with a diamond-striped russia leather lining. But the marquis of Bath probably possesses the best specimen of Whittaker's talents as a binder. It consists of a copy of Caxton's "Recuyell of the Histories of Troye," bound in russia. The back represents a tower, in imitation of stone. On the battlements of it is a flag, upon the folds of which the lettering is introduced, in a character precisely similar to that of the text. On a projection of the tower the name of the printer is impressed. On the outsides of the cover are Trojan and Grecian armour, in relief,

round which is a raised impression of the reeded axe. The edges of the leaves of this curious volume are a gold ground, on which are painted various Grecian devices. On the insides of the covers (which are likewise russia) is a drawing in India ink, of Andromache imploring Hector not to go out to fight ; and on the recto is the death of Hector.'

Messrs. Edwards, booksellers of Halifax, in Yorkshire, successfully pursued this branch, and several bindings of theirs exhibit borders of Greek and Etruscan vases, executed in a superior manner.

Mr. J. Hering revived stamped calf binding, but though practised for some time, for the want of a power of compression, they did not exhibit that sharpness we see on the impressed bindings of former times. But this was a step towards the attainment of the object in view. To our neighbours, the French, must be accorded the merit of the invention of the modern arabesque, and for its speedy introduction into, and successful operation in this country, to Messrs. Remnant and Edmunds, of Lovel's Court, Paternoster Row, London. The first specimen executed by them is here faithfully represented. The extent to which this branch has in a few years been carried, is almost unparalleled; for, from the ease and quickness with which some of the most extensive designs are produced, the economy is so great, that they have been

' Dibdin's Bib. Decameron, ii. 526.



applied to almost every kind of fancy work required in the book trade.

The French also invented a species of illuminated binding, in imitation of some of the interior embellishments of ancient missals. This was for some time kept secret: but one of our enterprising countrymen, Mr. Evans of Berwick Street, Soho, London, after much expense, introduced it into this country. It is a binding of the utmost magnificence, uniting the varied beauties of the arabesque and gilt ornament, with the illuminated decorations of MSS. before the invention of printing. Nothing can exceed the beauty of the whole *coup d'œil*, rivalling as it does the most elaborately finished design of the painter.* From the costly nature of this style of ornament, it must ever be confined to the embellishment of the finest treasures of literature.

Landscapes have also been painted on the sides as well as the edges of books; engraved portraits impressed on, and other designs transferred to, the sides. Indeed, nothing that could tend to the embellishment and variety of modern bookbinding, appears to have been neglected; and a superiority in the execution of whatever has been attempted is a distinguishing feature of the times.

A peculiarity in a few bindings must not be overlooked. This is, in the coincidence of the cover and the nature of the book. Whittaker bound a copy of "Tuberville on Hunting," in deer-skin, on the cover of which was placed a stag in silver. Jeffery, the book-

* See frontispiece to the *fine edition*.

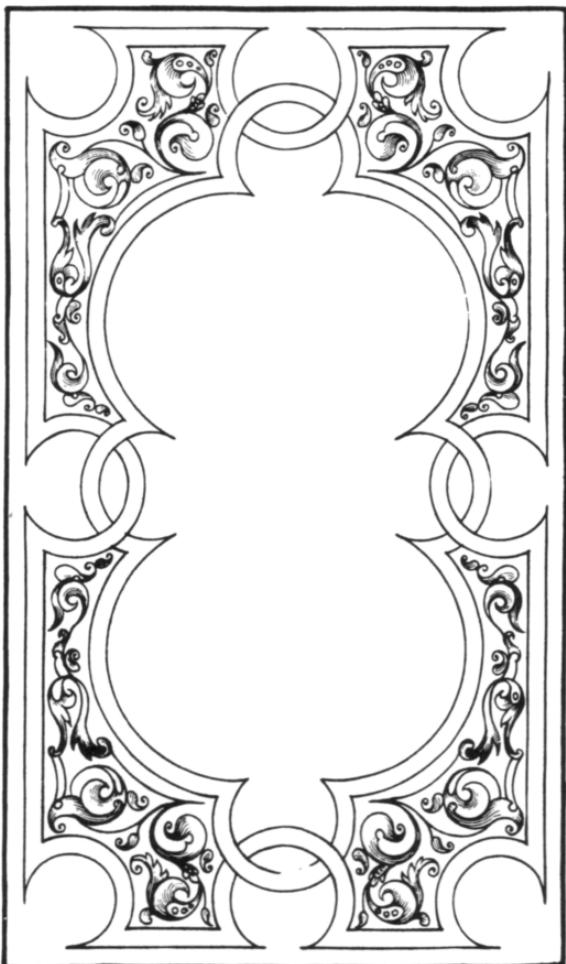
seller, bound Mr. Fox's historical work in *fox's* skin. And it is related that Dr. Askew had a book bound in human skin, for the payment of which his binder prosecuted him.⁶

That the English binders became superior to the French, is evidenced by the fact of many of the best bindings of France being executed in London previous to the time of Bozeraine. But at this period the French binders began to bestir themselves, and in the productions of the two Bozeraines, Thouvenin, and Simier, a reputation highly creditable to the French school is apparent; and the French bibliopoles have not been backward in claiming an equal degree of talent and ability for their countrymen which is accorded to our own.

The nineteenth century, witnessing as it has the collection of many, and augmentation of other libraries, tended much to this result in both countries. In England, the art can boast a long list of patrons in the Dukes of Devonshire, Sutherland, Marlborough, and Buccleuch, the Marquises of Lansdowne and Bath, Earls Spenser, Cawdor, Clare, and Burlington, Lords Vernon and Acheson, the Honourable Thomas Grenville, Sir F. Freeling, Sir R. Colt Hoare, bart., Sir Mark Sykes, Baron Bolland, Mr. Heber, Dr. Dibdin, Mr. Hibbert, Mr. Dent, Mr. Bernal, Mr. Drury, Mr. Petit, and a host of others, who have contributed much to the successful progress of the art.

The increased employment is shown by the num-

⁶ Dibdin's Bib. Decanteron, ii. 451.

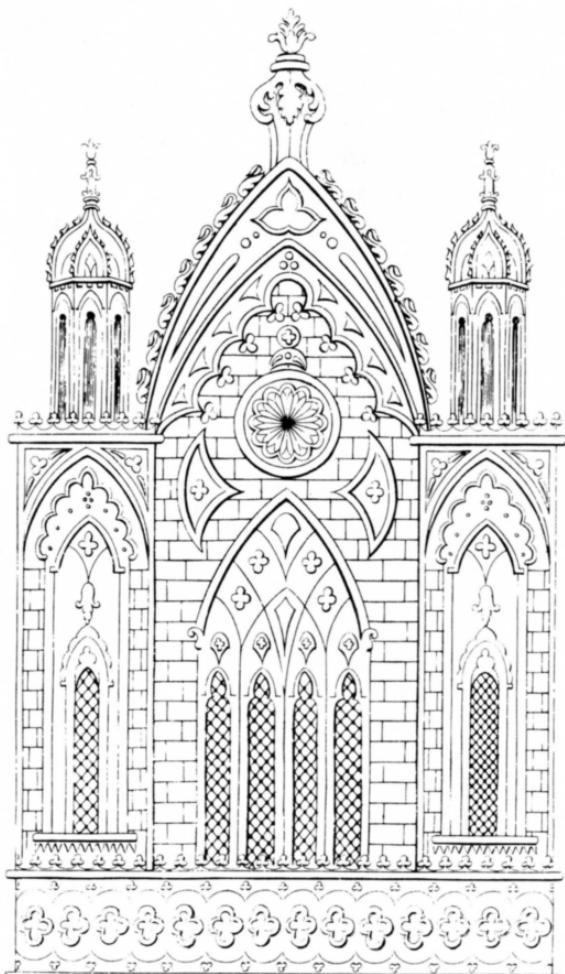


Morris & Co. Tool Cutters, 35 Ludgate Hill, London.

ber of master binders in London, A.D. 1812. At a general meeting in December of that year, no less than one hundred and fifty-nine subscribed their names to the regulations of prices, &c. adopted. Of these many were first-rate artists, and several still continue to execute bindings in the first style of the art. Doubtless, some are foremost in their profession; but where so many now excel, it would be invidious to particularize, were it not from a desire to prevent the names of those who are now eminent as binders, sinking into that entire oblivion, so far as the public are concerned, which it has been frequently our lot to deplore, during the investigation of the subject of the present work. Without passing any judgment on their respective merits, or peculiarities of workmanship, we shall therefore, in addition to those before introduced, simply record, as the leading London bookbinders of the present day, the names of Adlard, Bird, Burn, Clarke, Fairbairn, Hering, Heydey, Leightons, Lidden, Macfarlane, Mackenzie, Smith, Westley, Wickwar, and Wright. The modern binders of France are Courteval, Lefebre, the Bozeraines, Thouvenin, Simier, Lemoinier, Basin, Lesne, Matifa, Berthè, Coty, Durand, Bisonare, &c.

The successful operation of some of the processes we have before referred to, may be attributable to the great improvements in machinery used in the art, produced of late years. The hydraulic press, the rolling machine, and the arming or embossing

press, have done much for the rapid progress of the work, and its more perfect execution. The study of the antique in the ornaments used for finishing, and the superior engraving of the tools, became general. And with the ability to execute, on the part of the workman, a taste for the exterior decoration of books rapidly spread throughout the country. To what greater perfection bookbinding may come it would be hazardous to give an opinion, seeing that now it appears scarcely capable of progressing much further. In the elasticity, solidity, freedom, proportion of binding, and style of finish, it has not in any previous time been equalled, and the British binders generally of the present day may be pronounced, without egotism, as the first in their profession. The patronage and encouragement the art has received from all quarters has tended to cause a generous emulation among the modern sons of the craft, and with the most happy results; for bookbinding has fully participated in the advantages which these favourable circumstances have imparted.



Morris & Co's Tool Cutters, 23, Ludgate St, London.

CHAPTER VIII.

**FOREIGN BINDINGS POSSESSING PECULIARITIES NOT
BEFORE DESCRIBED.**

THE advance made by a nation in civilization, the facilities offered for the cultivation of literature, and the natural productions of, or readiness with which substances whereon to write could be obtained, must have ever had a very powerful effect on the modes adopted to preserve the written documents of various countries. Throughout Europe, as has been shown, a great similarity in the manner now exists, however great may be the difference in the beauty of appearance, and the style of finish. This being the case, the few peculiarities that are still found in European bindings will alone require description.

THE FRENCH,

have a style which they call *Indorsing*. Its peculiarity consists in a slip of parchment being applied over the back, between each band, the projecting ends being

pasted inside of each board. It is done in the press, where the back being grated to make the paste take hold, the parchment is fixed, and glue added to further strengthen the back.

THE ITALIANS,

possess a feature peculiar to their bindings, which they call *binding alla rustica*. It is merely covering the book with a coarse thick paper, and if wished a degree neater, applying a cover of fancy paper over. This proceeding, from the speedy destruction of the paper, is of very great inconvenience.

THE DUTCH,

whose bindings may be classed as the most elastic and solid, generally use slips of parchment, instead of packthread, for the sewing of their books.

THE GERMANS.

A peculiar feature in the German bindings, has acquired some celebrity from its preservation of the large margins, so sought after by the Bibliographer. It is called, *a la Bradel*. The sheets are cut to the same size before sewing, either single with the shears, or together in the cutting press. When sewed and boarded, the book is headbanded, and the head, tail, and covers covered with parchment. The

back is afterwards covered with leather, like a half-bound book, or wholly with fancy paper; most commonly, the latter. This style has been executed in France, and a volume, the first done in Paris, was presented to Charles X., in a beautiful binding of this description. It was entirely covered with gold paper, the edges gilt, the sides and back richly ornamented, and the letters of the title executed in silver. The binding was from the hands of *M. Berthè*, senior, No. 10, Rue Hautefeuille, Paris.*

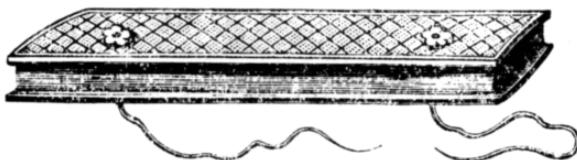
The bindings differing totally in appearance to those before described, are the Eastern, and may be classed under three heads: the Indian, the Chinese, and the Turkish.

THE INDIAN.

The Indian books are usually written on the leaves of plants or trees, generally the *palmyra*, on which the letters are engraved with a stylus. The Sloane library contains several of these MSS. written on leaves in the Sanscrit, Burman, Peguan, Ceylonese, and other languages.^b The Ceylonese appear to prefer the leaf of the *Talipot* tree, on account of its superior breadth and thickness. From these leaves they cut out slips from a foot to a foot and a half long, and about two inches broad. These slips being smoothed, and all excrescences pared off with the

* *La Relieur, par Le Normand*, 213.—^b *Ayscough's Catalogue*, 904, 906.

knife, they are ready for use without any other preparation. After the characters have been formed on the leaf, they rub them over with a preparation of oil and charcoal, which not only renders them more distinct, but so permanent, that they can never be effaced. When one slip is insufficient to contain the whole of a subject, the Ceylonese string several together by passing a piece of twine through them, and attach them to a board, similar to our manner of filing newspapers.^c But a greater regard for their preservation is shown for their more extended performances, or for such works as are held in estimation by them, as is displayed in the annexed sketch of a CEYLONSE BOOK.



The leaves are laid one over the other. They are not sewed as in European bindings, but kept together by two strings, as before referred to. These are laced through two holes made in each of the leaves, which are fastened to the upper covering of the book by two knobs, formed of some expensive article, sometimes of crystal. The boards which confine the

^c Percival's Ceylon, 205.

leaves together, are made of hard wood, generally the jack tree, and are often beautifully ornamented and painted.

The Birmans and Hindoos form and compose their books in the same manner, and of like material.^d A writer in the Asiatic Researches,^e says, the Burmans, in their more elegant books, write on sheets of ivory, or on very fine white palmyra leaves: the ivory is stained black, and the margins are ornamented with gilding, while the characters are enamelled or gilt. On the palmyra leaves the characters are in general of black enamel, and the leaves and margin painted with flowers in various bright colours. They are bound as before described. In the finer binding the boards are lacquered, the edges of the leaves cut smooth and gilt, and the title written on the upper board. The more elegant books are in general wrapped up in silk cloth, and bound round by a garter, in which the natives ingeniously contrive to weave the title of the book.

The East India Company's library contains a very elegant Burman MSS. in the Pali, or sacred character, presented by colonel Clifford. It is covered with coloured paper, with grotesque coloured figures. Another specimen has the edges partly gilt. This library also contains a very curious specimen of Batta writing, the production of, and presented by, a cannibal chief, Munto Panei. It is bound with plain wood

^d Symes's Embassy to Ava, ii. 409.—^e Vol. iv. 306.

covers. There is also another covered with leather, dressed with the hair on.

THE CHINESE.

The Chinese first made use of bamboo, cut very thin, for the formation of their books, afterwards silk or cotton. From these they subsequently manufactured paper, of which latter material their paper is still generally made. From the fineness of its texture, only one side can be written or printed on.^f This circumstance causes a distinct characteristic in the binding of the Chinese. Two pages are printed upon one leaf, usually from the top to the bottom, as seen in the engraving. The paper is then folded, and sewn up in the open part, while the close side composes the outer margin. The blank half of the leaf being thus joined, the printed part only is visible, which, from the thinness of the paper, appears as if on opposite sides of a single leaf. The cover is not glued to the leaves; it is a case wrapped round them, in some parts double, and secured by a fastening of silk and bone. When this is loosened, and the boards unfolded, there appears within from four to six or seven slightly stitched *livraisons*, about the size of one of our magazines, which can be taken out and replaced at pleasure.^g The cover or case of the Chinese bindings,

^f Morrison's Miscellany, 33, 34, ---; Astley's Collection, iv. 162-3.

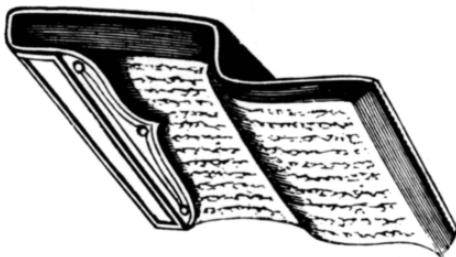


here represented, is formed of a brown paste-board, made of a species of smooth and strong paper. For their common books an addition of a cover of fancy paper is adopted; but for those in greater repute, they employ silk, or a species of taffeta with flowers, which they use almost solely for this purpose. Some of their books are covered with red brocade, ornamented with flowers of gold and silver. The title, written or printed on a slip of paper, is generally pasted upon a corner of the cover. Several of these Chinese books may be seen in the library of the East India Company.

THE TURKISH.

The early sovereigns of Turkey established *Kitab Khanès*, or public libraries, in the great cities of their empire. In Constantinople alone, there are now thirty-five, containing from one to five thousand manuscripts each. The followers of Mahomet have

a peculiar mode of binding their books. It resembles that of Europe in the manner of sewing and headbanding, but the back is left flat, instead of being rounded, as we are accustomed to form it. The books are usually covered with red, green, or black morocco, one of the sides being lengthened out, so as to fold over the fore edge, and fasten on the other side like the flap of a portfolio, of which the engraving will give a just idea.



Sometimes this projection is lodged between the board and leaves. The covers are enriched with ornaments, in gold and silver, or blank, as in our own country. The title of the book is marked upon the edges of the leaves, and also on the edge of the outer covering. This covering is a case of similar material to the binding, in which the latter is placed, to protect it from dust and injury. The books in the Turkish libraries, are placed in cases with glass or wire-work fronts, resting on their sides, one above another.

CHAPTER IX.

**SKETCHES AND BIOGRAPHICAL NOTICES OF BINDERS,
AMATEUR PROFESSORS, AND OTHERS, CONNECTED
WITH THE ART.**

To trace, with anything like distinctness, the lives of many distinguished professors of the Bibliopegistic art, is a task that cannot be accomplished, many being known only by the talent and skill of their workmanship. Connected only with their works, their names passed among their friends and contemporaries, as so distinguished, but with them sunk into oblivion, without other note or record. Though during life, thus keeping the even tenor of their way, there are many reasons for placing on record in this work what is known of such persons, who, from living in early times, or distinguished for superior talent in modern, command a degree of interest beyond those of less notoriety. The most important, perhaps, is the stimulus to those of the present, and coming days, to look forward to the like approbation

of, and success in, the world, which a diligent attention may, and will certainly lead to. And warned by the failures and errors of others, to avoid the temptations they are liable to be led into, and eventually forfeit a character for talent and integrity, no otherways to be obtained. But not less important is the record of their names with the History of the Art, with which their work, or their endeavours to effect improvements in its various branches, are connected, embodying, as the narrative must do, many facts, and notices not possible to introduce in the previous chapters. Alike interesting become the few particulars known of such amateur professors, as have devoted their time and study towards the acquisition of a knowledge of the Art, for to the patronage of many, and the assistance of others, it owes a debt of gratitude, for benefits conferred, which in a record of its History, it is but due to acknowledge.

The earliest professors of the Art, whose names have come down to us, are what may be distinguished as

MONASTIC BINDERS,

and those known are but few in number, when we consider that in every abbey, possessing the smallest library, means were always in requisition for the increasing of their MSS., and properly binding them under their own roofs.

DAGÆUS,

an Irish monk of the early part of the sixth century, is the earliest practitioner known, connected with the Art of binding books. He is celebrated as a skilful illuminator of their interiors, and not less so of the embellishment of their exteriors, binding and ornamenting the covers with gold, silver, and precious stones.^a

BILFRID,

a monk of the abbey of Durham, who lived about A. D. 720, is the first binder in England whose name has reached our time. He is stated to have pre-eminently excelled in the binding and ornamenting of books,^b and as being “*aurificii arte præcipuus.*”^c Of his skill and workmanship, a record has been preserved in the binding of the MSS. in the British Museum, described at page 46 of this work.

HERMAN.

bishop of Salisbury, about the year 1080, according to the *Monasticon Anglicanum*,^d was well versed in the binding of books, as well as the writing and illuminating of them.

^a O'Conor's *Rerum Hibernicarum*, clxxvii. ——^b Warton's *Eng. Poetry*, i. cxliv. dissertation 2. ——^c Simeon Dunhelm, *Hist. Eccl. Dunhelm.* 117. ——^d Vcl. iii. 275.

HENRY,

a monk of the Benedictine abbey of Hyde, near Winchester, is celebrated for his skill in the binding of books. A copy of Terence, Boetius, &c. which he had transcribed, is stated not only to have been bound by him, but that he also formed the brazen bosses of the covers with his own hands.^c

**BINDERS AFTER THE INVENTION OF
PRINTING.**

Of the numerous artists that sprung into notoriety after the invention of printing, little has been recorded, and of many of them, whether resident of England, it is not known with certainty. When printing was in its infancy, many English merchants found it to their account to import books from the continent, which, from their scarcity here, readily found purchasers. These, as was the custom at that time, were bound previous to leaving the printer, who had executed under his own roof, every department, from the casting of the letter, to the binding of the complete volume. Two of the names are known to be foreign artists, and some of the others which we shall have to record, though existing on bindings in this country, may belong to the artists of another.

^c Warton, i. cxliv.

CORNELIUS,

the bookbinder, as he is called in the evidence brought forward in proof of Lawrence Coster, of Haarlem, being the inventor of printing, appears to have been an assistant of Coster, in his youth.^f He lived there in the year 1440, and doubtless was an artist of some practice and talent at that period.

PIERS BAUDUYN,

Stationer and Bookbinder, appears to have been much employed by Edward IV. in binding and ornamenting the books for his library.^g The silk tassels, clasps, and other ornament, were previously prepared by the *silkwoman*, *coppersmith*, &c. and the binding executed by Bauduyn, who perhaps may have been appointed the king's bookbinder, as it will be seen such an office existed in another reign.

RASMUS, OR ASMUS,

living in 1531, and 1532, in which years he was paid considerable sums for the embellishment of the books, belonging to Henry VIII.^h He is described as being the armourer, but from the loose manner in which accounts were kept, it is not unlikely but that he was the party who not only ornamented, but

^f Johnson's *Typographia*, i. 6.—^g Wardrobe's Account of Edward IV. 125-6.—^h Privy Purse Expenses of Henry VIII. 123, &c.

bound the books too. In the same accounts, mention is made of the king's *bokebynder*, but whether this applies to Rasmus cannot now be ascertained.

NOWEL.

A bookbinder who dwelt in Shoe Lane, Fleet Street; was most probably a small binder for the printers of the day in which he lived, about A.D. 1530. It is almost certain, that he was latterly wholly employed by Wynkyn de Worde, and with satisfaction, as we find that he left Nowel in his will, dated June 5, 1534, twenty shillings in books.*

ALAR.D.

The name of this early binder is known only through the will of Wynkyn de Worde, above referred to, as "to Alard, *bookbinder*, my servant, six pounds, fifteen shillings, and fourpence."^b

L. BLOC.

This is one of four bibliopegistic heroes whose names have been perpetuated by the goodness of their bindings,—or the care the possessors have bestowed on them. Of their personal history, or the locality of their daily labours, nothing is known. We can, therefore, do no more than record their names as they have been met with. Bloc's exists

* Ames' *Typographical Antiquities*, i. 120.—^b *Ibid.*

round the border of a stamped calf cover, of the latter end of the fifteenth century, thus:—

LUDOVICVS BLOC OB LAVDEM XPRISTI LIBRVM HVNC
RECTE LIGAVI.^c

JOHN GUILBERT.

Is known only from a similar impression on a small folio of the same period, where he is designated as "JOHANNES GVILEBERT." The style of binding and ornament of these two latter persons appear much alike.

J. DE GAITERE.

Conjectured to be of Ghent, in Belgium, from the inscription, which is introduced at page 90, ante.

J. NORRIS,

The last of the above referred to, impressed his name, "*Jehan Norris*," on the books he bound. The whole of these persons must have been men celebrated in their day, and probably contemporaries. The sums necessary to be disbursed for the designs on the books, whereon their names appear, could not have been the case had they not been men of some note in their profession; and though positively nothing can be pronounced, still it is not an unfair presumption to consider them as first-rate artists of the times in which they flourished.

^c Dibdin's Bib. Decameron, ii. 467.

JOHN REYNES.

This person was an eminent Bookseller and Binder, residing at the George in St. Paul's Church-yard, about A.D. 1527. Many books of this period have his marks and devices impressed on their covers, as he bound many books for other dealers beside himself. His devices were two small shields, with his initials and his monogram. These he usually introduced in a large design, which he embossed on the covers of his books. It is not known in what year he died, but it is supposed about 1544. The Stationers' company formerly possessed a portrait of him.^d

MICHAEL LOBLEY,

one of the original members of the Stationers' company, united the branches of Bookseller, Printer, and Bookbinder, at the St. Michael, in St. Paul's church-yard. He filled several offices in the Stationers' company, but in the latter part of his life appears to have been so much reduced, as not to have been able to discharge his note for 7*l.* which he stood indebted to the company; for having paid 3*l.* "the rest was forgiven him by the hole table."^e He carried on business from A.D. 1531, to 1563.

JOHN TOYE.

Little further is known of this person, than his being engaged with John Day, the celebrated printer,

^d Ames' Typog. Antiq. i. 120. — ^e Ibid ii. 756.

a pursuivant and other officers, by order of the bench of bishops, in search for a work called, "The Puritanic Admonition to the Parliament," wherein the government of the English church was attacked with great severity. This was about 1566. It is more than probable that this is the same person, as the John Toye, living at the sign of St. Nicholas, in St. Paul's church-yard, which appears on a "Gradus comparationum cum verbis," &c. 4to. printed in 1531.^f

WILLIAM HILL.

Originally a printer, who lived at the sign of the Hill, in St. Paul's church-yard. The books bearing his name are dated 1548 and 1549. He is considered to have left off printing, and devoted his attention to bookbinding. He was fined in 1556, for binding primers in parchment, contrary to the Company's orders.^g

JOHN GIBSON,

Bookbinder to James VI. of Scotland, being appointed to that office in the year 1581. He appears to have been an artist of some celebrity, as seen in the account of his work, and other particulars referred to, at page 99. Gibson had been employed by James, previous to his appointment, as shown by the following entries in the accounts of the High Treasurer of Scotland :—

^f Ames, i. 569.—^g Ibid. ii. 756.

Maii 1580.

Item be the Kingis Majesteis precept to Johnne Gibbsoun buikbinder, for certane buikis furnist to his hienes, conforme to his particular compt, as the samyn with the said precept and his acquittance schewin upoun compt beris, xlj lib. vj s.

October 1580.

Item be the Kingis Majesteis precept to Johnne Gibbsoune buikbindar, ffor certane buikis maid be him to his hienes, conforme to the particular compt gevin in therupoun, as the samyn with the said precept and his acquittance schewin upoun compt beiris, xx li.

Januare 1582.

Item be his Majesties precept to Johnne Gibbsoun buikbindare, for sindrie volumes bund to his hienes, as the precept with his acquittance producuit upoun compt beris, v lj. xvij s. viij d.

Marche 1582.

Item for binding of the New Testament to his Majestie be Johne Gibbsoun buikbindare, xiiij s.^b

ANDREW HART.

A Scotch bookbinder in the time of James VI., of whom nothing is known except his having bound some books for the above monarch. In the accounts above referred to is the following entry :—

^b The Library of Mary Queen of Scots, and James VI. 4to.

Aprile 1602.

Item payit to Andro Hart Buik binder, for certane
buikis quhilkis wer gevin to Mr Adam Newtoun for
the Prince his use, as the said Mr Adamis ressait
thairof producit testifeis, xxxij li. ix s.

GARRET.

a bookbinder at Cambridge, about 1544. The binders here at that period were considered superior workmen, but of the personal history of this man, nothing is known. Roger Ascham, speaking of Erasmus' custom of riding on horseback for exercise, after "he had been sore at his booke," says, "*as Garrett, our booke-bynder, verye oft told me.*"^k

DOMINICK AND MILLS.

Two Oxford binders of good reputation about the year 1597; and considered by the Oxonians of that period superior to those of London. In answer to a complaint from Dr. James, the first keeper of the Bodleian library, we find Sir Thomas Bodley writing, "I am sorry to hear of those abuses of my binder. Send me word at what price your binders will bind an ordinary book in folio." And again, "would to God you had signified wherein the imperfections of our London binding did consist."^l He also promises,

^k Ascham's English Works, 77.—^l Hearne's Relique Bodleiana, 159 and 185.

if the Oxford price "is reasonable, I will send sufficient work for *Dominick* and *Mills*, or some other for a month or two."

MODERN BOOKBINDERS.

In proceeding to give a few notices of the modern sons of the craft, the name that claims priority, as being the greatest binder England had, up to his day, produced, is that of

ROGER PAYNE.

The personal history of Roger Payne is one, among the many, of the ability of a man being rendered nearly useless by the dissoluteness of his habits. He stands an example to the young, of mere talent, unattended with perseverance and industry, never leading to distinction,—of great ability, clouded by intemperance and consequent indiscretion, causing the world only to regret how much may have been lost, that might have been developed, had the individual's course been different, and his excellences directed so as to have produced the best results.

Roger Payne was a native of Windsor Forest, and first became initiated in the rudiments of the art he afterwards became so distinguished a professor of, under the auspices of Mr. Pote, bookseller to Eton college. From this place he came to London, where he was first employed by Mr Thomas Osborne, the



Lcc. sc

Roger Payne.

bookseller, of Holborn, London. Disagreeing on some matters, he subsequently obtained employment from Mr. Thomas Payne, of the King's Mews, St. Martin's, who ever after proved a friend to him. Mr. Payne established him in business near Leicester-square, about the year 1766-1770, and the encouragement he received from his patron, and many wealthy possessors of libraries, was such that the happiest results, and a long career of prosperity, might have been anticipated. His talents as an artist, particularly in the finishing department, were of the first order, and such as, up to his time, had not been developed by any other of his countrymen. He adopted a style peculiarly his own, uniting a classical taste in the formation of his designs, and much judgment in the selection of such ornament as was applicable to the nature of the work it was to embellish. Many of these he made himself of iron, and some are yet preserved as curiosities, and specimens of the skill of the man. To this occupation he may have been at times driven, from lack of money to procure them from the tool-cutters; but it cannot be set down as being generally so, for in the formation of the designs in which he so much excelled, it is but reasonable to suppose, arguing upon the practice of some others in later times, he found it readier and more expedient to manufacture certain lines, curves, &c. on the occasion. Be this as it may, he succeeded in executing binding in so superior a manner as to have no rival, and to command the admiration of

the most fastidious book-lover of his time. He had full employment from the noble and wealthy, and the estimation his bindings are still held in, is a sufficient proof of the satisfaction he gave his employers. His best work has before been described, as being in earl Spenser's library. The following bill relates to an ancient edition of Petrarch in the same collection.

The paper was very weak, especiaaly at ye Back of this Book. I was obliged to use new paper in ye Washing to keep the Book from being torn or broken. To paper for Washing,.....	2 0
To Washing their was a great deal of Writing Ink and the bad stains, it required several washings to make the paper of the Book quite safe, for, tho the Book with one or two washings would look as well at present, it will not stand the test of Time without repeated washings. Carefully and quite Honestly done,.....	9 0
To Sise-ing very carefuyl and Strong,.....	7 6
To Sise to Sise the Book,.....	1 6
To mending every Leaf in the Book, for every Leaf wanted it thro' the whole Book, especiaaly in y ^e Back Margina. I have sett down y ^e number of pieces to each Leaf,*......	10 6
Cleaning the whole Book,.....	4 0
<hr/>	
The Book had been very badly folded and the Leaves very much out of square; I was obliged to Compass every leaf single, and mark the irregular parts, and take them off without parting the sise of the Copy, very carefully, and Honestly done,.....	1 14 6
The Book being all Single Leaves, I was obliged to stich it with silk fine and white, to prepare it for sewing done in the Best manner and uncommon,	3 6
The copy of the Book was in very bad Condition when I received it. The most Antiq. Edition I think I have ever seen. I have done the very best; I spared no time to make as good and fair a	2 6

* At foot of the bill is an enumeration of the pieces.

Copy as is in my power to do for any Book, that EVER DID, OR EVER WILL, OR EVER CAN be done by another workman ; thinking it a very fine unique edition. Bound in the very best manner in Venetian Coloured morocco leather, sewed with silk, the Back lined with a Russia Leather. Finished in the Antiq. Taste, very Correctly lettered, and very fine small Tool Work, neat Morocco joints, Fine Drawing Paper inside to suite the colour of the Original paper of the Book. The Outside Finished in a True Scientific ornamental Taste magnificent. The Book finished in the Antiq. Taste, very correctly letter'd in Work. The Whole finished in the very Best manner for preservation and elegant Taste, 4 7 0

Here we have the whole minutia of the mode of proceeding, and this appears to have been a peculiarity in all his bills, each book of his binding being accompanied by a written description of the ornaments in a like precise and curious style. Here is another relative to a book bound for Dr. Moseley; which also exhibits a little jealousy of his brethren of the craft, or a due appreciation of his own talent, by the contemptuous manner he refers to them.

Versalii Humani Corporis fabrica. The title Washed, Cleaned and very neatly Mended, The opposite Leaf Ditto. The Portra'le Margins Cleaned and the opposite Leaf Ditto. Fine Drawing Paper inside, exceedingly neat and strong morocco joints. Fine purple paper inside very neat. The Outsidess Finished with Double Panes and Corner Tools agreeable to the Book. The Back finished in a very elegant manner with small Tools, the Boards required Peice-ing with Strong Boards and strong Glue to prevent future Damage to the Corners of the Book. 2 Cutts new Guarded. The former Book-binder had mended it very badly as usual. I have done the very Best Work in my Power according to Orders, took up a great deal of Time. 0L 15s. Od.

In another Bill he says. 'The Back coverd with Russia

Leather, before the outside cover was put on. N.B. The Common practice of Book-binders is to line their Books with Brown or Cartridge Paper, the paper Lining splits and parts from the Backs and will not last for Time and much reading.

These are only a few of the curious and characteristic specimens of the bills of our artist, but they are sufficient to attest the superiority of his workmanship over the living binders of the day, and the justness of its appreciation by the most distinguished bibliopolists. But his reputation as an artist of the greatest merit, was obscured, and eventually nearly lost, by his intemperate habits. He loved drink better than meat. Of this propensity an anecdote is related of a memorandum of money spent by, and kept by himself, which run thus:—

For Bacon, - 1 half-penny,

For Liquor, - 1 shilling.

No wonder then, with habits like these, that the efforts of his patron, in fixing him, were rendered of no avail. Instead of rising to that station his great talent would have led to, he fell by his dissolute conduct to the lowest depth of misery and wretchedness. Of his squallid appearance, an idea may be formed by the annexed engraving. It is taken from a print, which Mr. Payne caused to be executed after his death, at his own expense, and exhibits the man in his wretched working-room, as in life he daily appeared. Here, however, was executed the splendid specimens of binding we have before referred to; and here on the same shelf were mixed together, old shoes and

precious leaves—bread and cheese, with the most valuable and costly of MSS., or early printed books.

That he was characteristic or eccentric may be judged by what has been related of him. He appears to have also been a poet on the subject of his unfortunate propensity, as the following extract from a copy of verses, sent with a bill to Mr. Evans, for binding “Barry on the Wines of the Ancients,” proves.

“Homer the bard, who sung in highest strains
The festive gift, a goblet, for his pains;
Falernian gave Horace, Virgil fire,
And Barley Wine my British Muse inspire.
Barley Wine, first from Egypt’s learned shore;
And this the gift to me of Calvert’s store.”

He commenced business in partnership with his brother Thomas Payne, and subsequently was in like manner connected with one Richard Wier, but did not long agree with either, so that separation speedily took place. He afterwards worked under the roof of Mr. Mackinlay, but his later efforts showed that he had lost much of that ability he had been so largely endowed with. Pressed down with poverty and disease, he breathed his last in Duke’s Court, St. Martin’s Lane, on the 20th of November, 1797. His remains were interred in the burying-ground of St. Martin’s in the Fields, at the expense of Mr. Thos. Payne, who, as before stated, had been his early friend, and who, for the last eight years of his life, had rendered him a regular pecuniary assistance

both for the support of his body and the performance of his work.^a

Of the excellencies and defects of his bindings, a party well qualified to judge, and to whose researches we are indebted for greater part of this memoir, has thus recorded his opinion, and with which we shall close our account :—

“ The great merit of Roger Payne lay in his taste—in his choice of ornaments, and especially in the working of them. It is impossible to excel him in these two particulars. His favourite colour was that of olive, which he called *Venetian*. In his lining, joints, and inside ornaments, our hero generally, and sometimes melancholily failed. He was fond of what he called purple paper, the colour of which was as violent as its texture was coarse. It was liable also to change and become spotty; and as a harmonizing colour with olive, it was odiously discordant. The joints of his books were generally *disjointed*, uneven, carelessly tooled, and having a very unfinished appearance. His backs are boasted of for their firmness. His work excellently forwarded—every sheet fairly and *bona fide* stitched into the back, which was afterwards usually coated in russia; but his minor volumes did not open well in consequence. He was too fond of thin boards; which in folios produces an uncomfortable effect, from fear of their being inadequate to sustain the weight of the envelope.^b

^a Nichols's Literary Anecdotes, iii. 736.—^b Dibdin's Bib. Dec. ii. 508.

RICHARD WIER.

A partner of Roger Payne's, and one not a whit less dissolute than himself. Previous to this, he and his wife,* viz. in 1774, were employed at Toulouse, in binding and repairing the books in count Macarthy's library. The connexion between Wier and Roger, which took place during the latter part of Payne's career, as might be expected from both of their habits, was of short duration. They were generally quarrelling, and Wier, being a man of strong muscular power, used sometimes to proceed to thrashing his less powerful coadjutor. Payne is said to have composed a sort of *Memoir of the Civil War* between them. After their separation, Wier went abroad; and being taken prisoner by a privateer, he is said to have threatened to demolish half the crew if they did not liberate him. Like his partner, he worked the latter part of his life with Mr. Mackinlay.^c

BAUMGARTEN,

was a German binder of some note in London, in the early part of the eighteenth century, but of whose personal history nothing has been left on record.

^c Dibdin's Bib. Decameron ii. 567.

* Mrs. WIER, celebrated as the most complete book-restorer that ever lived. She was for a long time employed by Roger Payne; and her skill in mending defective leaves was such, that, unless held up to the light, the renovation was imperceptible. On her return from France, she went to Edinburgh to repair the books in the Record Office in that city.

BENEDICT.

Contemporary with Baumgarten, but alike situated, having no other record left of his life and labours than has been recorded at the one hundred and fifty-second page of this work.

JOHN MACKINLAY,

for many years one of the most substantial and creditable binders of the British metropolis. His bindings in general are not so much celebrated for their splendour as for the general goodness of the workmanship. But he sometimes appears lavish of ornament, of which specimens exist in earl Spenser's and other libraries.

He has the credit of being the instructor of many of the most celebrated binders that have since his day sprung into notoriety.

Mr. M., during his latter years, was unfortunate in having his office destroyed by fire.

KALTHEUBER.

A reputable binder of the same period as Mackinlay. He was noted for his russia bindings, and latterly worked in the premises of Mr. Oridge, the bookseller.

STAGGEMIER,

in business at the same period as the above, was a binder of reputation and taste. The Royal Institution possessed the best specimen of Staggemier's

skill, in the binding of the "Didot Horace," of 1799, presented by Mr. Thomas Hope. It is in blue morocco, and embellished with ornaments cut after the antique models.

WALTHER,

a binder bearing the character of executing his work in a "good, substantial, honest manner." He had no pretensions for any style peculiar to himself, but gained the character bestowed upon him from the excellent manner every part was performed. In his office the celebrated Charles Lewis gained the first rudiments of the art he afterwards so much excelled in.

HENRY FALKNER,

Celebrated as a honest, industrious, and excellent bookbinder, who, in his mode of rebinding ancient books, was not only scrupulously particular in the preservation of that important part of a volume, the margin: but in his ornaments of tooling, was at once tasteful and exact.⁴ Faulkner, after thus giving satisfaction to his patrons, and biddnig fair to be the first binder of his day, died of a consumption in 1812, leaving a large family, which, it is but justice to state, were materially assisted by those who had employed and respected their father.

CHARLES HERING.

After the death of Roger Payne, Hering, for about twelve years, was considered the head of the craft.

⁴ Dibdin's *Bibliomania*, 264.

He was an extremely skilful binder, and a remarkably industrious man. His bindings exhibit a strength and squareness, with a good style of finish, which renders his work of much value, and establishes the reputation accorded to him. His faults were a too great fondness for double headbands, and the use of brown paper linings, with a little inclination to the German taste. Possessing the reputation he did, the principal libraries of this country contain many of his bindings. The business is still conducted by his brother with success.

JOHN WHITTAKER,

was celebrated as the restorer of deficient portions of works printed by Caxton, &c. by the use of brass type; and the inventor of gold printing, now become nearly general. He introduced a new style of binding, to which the name of *Etruscan* has been given. This style he employed for the binding of many of the copies of the Magna Charta, printed by himself in gold. The description of this mode of binding has been given in a previous chapter, and many specimens of other works exist in the libraries of the wealthy and curious. The binding of the copy of Magna Charta belonging to his late Majesty George IV, is of a magnificent description. The covers are nearly a complete mass of gold ornament, appropriate to the times of king John. It is lined with crimson silk, richly gilt.

CHARLES LEWIS,

one of the most eminent binders the British capital has produced, and by several considered as being the first in his day, was born in London in the year 1786; and at the age of fourteen became apprentice to Mr. Walther, of whom we have given a brief record. After serving the full period of his apprenticeship, and working as a journeyman in several shops in the metropolis, he commenced business on his own account in Scotland Yard. At this place, and subsequently in Denmark Court, Strand, and Duke Street, Picadilly, he displayed as much perseverance and attention in the management of his business, as skill and energy in the pursuit of the art, he appears from his first introduction to it at Mr. Walther's to have been passionately devoted to. His bindings are to be found in nearly all the libraries of the modern patrons of the book trade we have before enumerated, for some of whom he worked very extensively, and to the satisfaction of his employers. On the character of his binding, Dr. Dibdin has thus enlarged :—" The particular talent of Lewis consists in uniting the taste of Roger Payne with a freedom of forwarding and squareness of finishing peculiarly his own. His books appear to move on silken hinges. His joints are beautifully squared, and wrought upon with studded gold ; and in his inside decorations he stands without a compeer. Neither loaf-sugar paper, nor brown, nor pink, nor poppy-coloured paper are

therein discovered : but a subdued orange, or buff, harmonizing with russia ; a slate or French grey, harmonizing with morocco ; or an antique or deep crimson tint, harmonizing with sprightly calf : these are the surfaces, or ground colours, to accord picturefully, with which Charles Lewis brings his leather and tooling into play ! To particularize would be endless ; but I cannot help just noticing, that, in his *orange* and *Venetian* moroccos, from the sturdy folio to the pliant duodecimo—to say nothing of his management of what he is pleased facetiously to call binding *à la mode Francaise*, he has struck out a line, or fashion, or style, not only exclusively his own, as an English artist, but, modelled upon the ornaments of the Grolier and De Thou volumes, infinitely beyond what has yet been achieved in the same bibliopegist department. It is due to state, that in his book restorations he equals even the union of skill in Roger Payne and Mrs. Weir. We may say—

‘ And what was *Roger* once, is *Lewis* now.’ ” *

After a very successful career, and in the enjoyment of an extended business, he was seized with apoplexy in the month of December, 1835, from which he never recovered, expiring on the eighth day of January, 1836. His eldest son now carries on the business.

* Dibdin’s Bib. Dec. ii.

FRENCH BOOKBINDERS.

The reputation of the binders of France, as we have before stated, at one time far exceeded that of any other country. The names of the principal operators, therefore, claim a distinguished place in this chapter. And it will not be irrelevant here to introduce a brief notice of the principal binders of the French capital of the present day.

GASCON.

This person is considered to be the first who introduced an elaborate style of gilt and other ornament on books into France. He lived in the time of Henry II., and is conjectured to have bound part of that monarch's library, as well as that of the chevalier Grolier, who doubtless contributed much to their proper execution by the taste and knowledge of the subject he possessed.

DU SUEIL

threw more of solidity into his work than his predecessor Gascon, while he did not neglect the finish given to his volumes. His reputation stands high among the lovers of books for the goodness of his work, as is attested by the remarks in book catalogues, where any of his bindings are named. A very fine collection of the *Abbé*'s handy works were contained in the collection of the count of Brienne,

which was to be sold very cheap at James Woodman's and David Lyon's shop, in Russell Street, Covent Garden, on Tuesday, the 28th day of April, 1724. This library was as select (it had been chiefly collected by the famous Father Simon, the best critic in books in his time) as it was magnificent; the advertisement telling us that "several hundred of the books had been new covered in morocco by Monsieur L'Abbe Du Sueil." Accordingly, we read perpetually "cerio turcico compactem per Abbatem de Sueil;" or "relie en maroquin per l'Abbe du Sueil;" or "bound by A. de S., gilt, and marbled on the leaves;" or "nicely covered in morocco by the A. du S." Pope, in the fourth epistle of his "Moral Essays," has contributed to the popularity of the *Abbé du Sueil*. He was fond of a variety of colours on his morocco covers, and worked solidly and elegantly in the taste of his day.

PASDALOUP

was also celebrated for the strength and beauty of his workmanship. He was fond of red morocco covers and linings, with a fillet or border of gold upon each. He sometimes formed his fly-leaf of gold paper. His work is also often cited in sale catalogues, and, like the above, will perhaps be so for many years, as the substantial manner in which it is executed appears to be capable of lasting for centuries.

DE ROME.

This person has been styled the *Phœnix* of Binders. He was a contemporary of Pasdaloup, and appears to have worked much in the same style, throwing great solidity into the forwarding of his books, and much elegance into the finishing. His bindings, consequently, are as much sought after, and as highly prized by the possessors.

DE LORME.

A good binder of the same period as Pasdeloup and De Rome, but not so celebrated. His countrymen charge him with the imitation of some of the *bad* English binding.

COURTEVAL,

an artist of modern times, presented a new feature in his bindings by the union of elasticity and solidity, now so much and rightly estimated. He appears to have been a man of talent as well as taste, in estimating and adopting the improvements of other nations, and rejecting their errors along with those of his own. Very few workmen of his day united in an equal degree the grace, solidity, elegance, and proportion, that is found in the bindings that came from his hands. Very little, if any, fault can be found in them.

LEFEBRE,

another binder of modern times, who, rejecting the prejudices of custom, adopted the improvements in-

troduced, and, by increased success, justified the expectations he may have formed. His bindings possess no other peculiarity.

BOZERAIN, SEN.

The elder Bozeraine may be said to have reintroduced the good taste of former days into France. He studied the style of his celebrated countrymen of the fifteenth century, and adopted all the judicious improvements that had been introduced elsewhere, carrying it towards that success his brother afterwards accomplished. By his efforts, many distinguished collectors ceased to have their books bound in England; where, from the low state to which the art had sunk in France, they had for some time previous been accustomed to send their best binding.

BOZERAIN, JUN.

The younger Bozeraine was considered the first bookbinder in France, and his work consequently held in great repute by the Parisian collectors. He appears to have been ardently attached to his art, and pursued it progressively to the successful issue of being, by his own countrymen at least, considered the first artist in the world. He is said to have been a long time in overcoming the prejudices of many workmen; but he possessed courage to persevere in his endeavours, and finally triumph. It is saying much for his reputation, independent of his

workmanship, that his contemporaries admit, nearly all the good workmen have come from his establishment. No wonder, then, that the biblical Parisians make a grand crack about him, and place him in rivalry with Charles Lewis. English book-collectors, however, have not accorded that degree of celebrity to Bozeraine, which his countrymen have freely and lavishly done. His bindings are well known in London. They are considered to be forwarded too expeditiously, and beaten too much. His love of finery, of satinizing, of red ruling, and of gorgeous and flimsy ornament, do not accord with the idea of true propriety and chasteness here so distinguishable on the best bindings.

THOUVENIN.

Unlike Bozeraine, jun. Thouvenin became celebrated as an artist on his first establishment, and his first performances are as much valued as any of his subsequent efforts. Being a pupil of Bozeraine's, he had availed himself of all the good lessons of that distinguished workman, who, as it has been seen, had opened a way for the introduction of the style of binding so much renowned in former centuries. Thouvenin thus had the advantage of being known to all the principal book-collectors, who, on his establishment, entrusted him with many of their rare books, and they were not mistaken in their ideas of his talent and ability. He imitated the English gildings, and

produced several specimens of a Gothic character. In all his work he reflected an honour on his teacher, Bozeraine. He unquestionably was a binder of celebrity ; but whether deserving of the following highly-coloured encomium of one of his contemporaries may admit of a doubt :—

“ Thouvenin is one of those extraordinary men, who, similar to that luminous body, a comet, appear but once in a century. If more ambitious of glory than of fortune, he continues to watch ; if less workman than artist, he occupies himself without intermission in the perfection of binding ; it will be an epoch in his art, as distinguished as those of the great men that we have admired in the epoch of literature.”¹

SIMIER.

another modern artist, and *relieur du roi*, as the backs of some of his bindings testify. He, like some of the above, contributed to the introduction of a better style and taste into France. His bindings, some of which are in this country, are very creditable performances.

LESNE,

a Parisian artist of not much note in his business, but as having written a poem, in six cantos, on the Art of Bookbinding, which he published in 1820.

¹ *La Relieure, par Lesne* ; 117

This he dedicated to his son. He appears to be enthusiastic on his subject, and handles it with much spirit and cleverness. He suggested some improvements in the manner of sewing books, which should give to them greater freedom, elasticity, and solidity; and in furtherance of his object, presented a "Memoire" to the *Société d'Encouragement*, in 1818, which met with a favourable report.

Subsequently, in consequence of some remarks on the Parisian binders, made by Dr. Dibdin, in his Bibliographical Tour, Lesne again figured in a pamphlet in reply, taking up the matter for his bibliophilistic brethren, in rather hastier temper than the occasion demanded or warranted.

AMATEUR PROFESSORS.

The number of noble and distinguished persons who have occupied their leisure in the pursuit of the art of bookbinding, is doubtless considerable; but the record of their acts, and the proof of their workmanship, have alike been lost or overlooked. We have referred to some who possessed considerable knowledge of the various processes necessary in binding a book. The account of the Ferrars family, the Hon. Roger North, and the celebrated William Hutton, furnish us with more important details.

THE FERRARS FAMILY.

This family lived at Little Gedding, in the county of Hertford, in the reigns of James I. and Charles I.

They were distinguished for their piety and industry. The greater part of the family, male and female, appear to have understood and practised the art of bookbinding in all its varieties. Wordsworth^a has given several details of the work they executed.

HONOURABLE ROGER NORTH.

This distinguished man of his time was, in his younger days, passionately fond of the art bibliopegistic, and pursued it with creditable success. His relative, in his biography, thus speaks of this peculiarity of his character :—

“ The young gentleman took a fancy to the binding of books, and having procured a stitching-board, press, and cutter, fell to work, and bound up books of account for himself, and divers for his friends, in a very decent manner.”^b

WILLIAM HUTTON,

who, from being a stocking-weaver, in the most abject state of poverty, raised himself to affluence, and the respect and regard of the learned and wealthy, was originally an amateur bookbinder. To this circumstance the success of his career may, without cavil, be principally attributed. It is curious to trace his progress, as he has recounted in his Life. He was fond of books and music, and, in 1746, he says, “ an inclination for books began to expand, but here,

^a Eccl. Biography, v. 172—178, 216, 220, 257.—^b North’s Life of Sir Dudley North.

as in music and dress, money was wanting. The first articles of purchase were three volumes of the Gentleman's Magazine, 1742, 3, and 4. As I could not afford to pay for binding, I fastened them together in a most cobbling style. These afforded me a treat.

"I could only raise books of small value, and these in worn-out bindings. I learnt to patch, procuring paste, varnish, &c., and brought them into tolerable order, erected shelves, and arranged them in the best manner I was able.

"If I purchased shabby books, it is no wonder that I dealt with a shabby bookseller, who kept his working apparatus in his shop. It is no wonder, too, if by repeated visits I became acquainted with this shabby bookseller, and often saw him at work; but it is a wonder, and a fact, that I never saw him perform one act but I could perform it myself; so strong was the desire to attain the art.

"I made no secret of my progress, and the bookseller rather encouraged me, and that for two reasons: I bought such rubbish as nobody else would; and he had often an opportunity of selling me a cast-off tool for a shilling, not worth a penny. As I was below every degree of opposition, a rivalship was out of the question.

"The first book I bound was a very small one—Shakspeare's *Venus and Adonis*. I showed it to the bookseller. He seemed surprised. I could see jealousy in his eye. However, he recovered in a

moment, and observed, that though he had sold me the books and tools *remarkably cheap*, he could not think of giving so much for them again. He had no doubt but I should break.

" He offered me a worn-down press for two shillings, which no man could use, and which was laid by for the fire. I considered the nature of its construction, bought it, and paid the two shillings. I then asked him to favour me with a hammer and a pin, which he brought with half a conquering smile and half a sneer. I drove out the garter pin, which, being galled, prevented the press from working, and turned another square, which perfectly cured the press. He said in anger, ' If I had known, you should not have had it! This proved for forty-two years my best binding press.' "¹

From an amateur, Hutton soon became a professed bookbinder: for we find him, in 1748, thus express himself:—" Every soul who knew me scoffed at the idea of my turning bookbinder, except my sister, who encouraged and aided me, otherwise I must have sunk under it. I hated stocking-making, but not bookbinding. I still pursued the two trades. Hurt to see my three vols of Magazines in so degraded a state, I took them to pieces, and clothed them in a superior dress." And again in 1749. " A bookbinder, fostered by the stocking frame, was such a novelty, that many people gave me a book to bind. Hitherto I had

¹ Hutton's Life, 130—2.

only used the wretched tools, and the materials for binding, which my bookseller chose to sell me; but I found there were many things wanting, which were only to be had in London; besides, I wished to fix a correspondence for what I wanted, without purchasing at second hand. There was a necessity to take this journey; but an obstacle arose,—I had no money."

This journey took him nine days, walking to London and back again, and of his extraordinary economy, his expenses during that time are a proof, having expended no more than eight shillings and fourpence. He says, "I only wanted three alphabets, a set of figures, and some ornamental tools for gilding books; with leather and boards for binding." He fixed at Southwell, in Nottinghamshire, "took a shop at the rate of twenty shillings a year, sent a few boards for shelves, a few tools, and about two cwt. of trash, and became the most eminent bookseller in the place."^k His subsequent life is well known.

The last name in our biographical notices, is one now become celebrated as of the most distinguished chemist of the day, viz.

MICHAEL FARADAY.

This eminent person was the son of a humble blacksmith, who apprenticed him to a small book-

^k Hutton's Life, 137, 138, 145.

binder in Blandford Street, when only nine years of age, and in which occupation he continued till he was twenty-two. The circumstances that occasioned his exchanging the work-room of the binder for the laboratory of the chemist, have been thus forcibly related. Ned Magrath, now secretary to the Athénæum, happening five and twenty years ago to enter the shop of Ribeau, observed one of the bucks of the paper bonnet zealously studying a book he ought to have been binding. He approached—it was a volume of the old *Britannica*, open at ELECTRICITY. He entered into talk with the greasy journeyman, and was astonished to find in him a self-taught chemist of no slender pretensions. He presented him with a set of tickets for Davy's lectures at the Royal Institution; and daily thereafter might the nondescript be seen perched, pen in hand, and his eyes starting out of his head, just over the clock opposite the chair. At last the course terminated; but Faraday's spirit had received a new impulse, which nothing but dire necessity could have restrained; and from that he was saved by the promptitude with which, on his forwarding a modest outline of his history, with the notes he had made of these lectures, to Davy, that great and good man rushed to the rescue of kindred genius. Sir Humphrey immediately appointed him an assistant in the laboratory: and, after two or three years had passed, he found Faraday qualified to act as his secretary!'

¹ Frazer's Mag. xiii. 224.

His career has been successful, and he now stands at the head of his profession. He ranks as one of the first lecturers of the day, and has published several works highly and deservedly popular.

CONCLUSION.

OUR endeavours to illustrate the rise and progress of the art of writing and composing books, and the successive improvements in bookbinding, are now brought to a termination. The simple records of the earliest people; the rolls of the Greeks and Romans; the massy and costly books of the monasteries and churches; the elaborately ornamented volumes of a later period,

“ Firmly clasp'd in oak, and velvet bound ;”

and the highly-finished works of modern days; with other incidental matter, have been enlarged upon. With what degree of success, it is for others now to arbitrate. We close, therefore, our account with the description of the Art in the well-known Poem, “The Press,” by Mr. M’Creery.

“ Embodied thought enjoys a splendid rest
On guardian shelves, in emblem costume drest;
Like gems that sparkle in the parent mine,
Through crystal mediums the rich coverings shine;
Morocco flames in scarlet, blue, and green,
Impres'd with burnish'd gold, of dazzling sheen;
Arms deep emboss'd the owner's state declare,
Test of their worth—their age—and his kind care ;

Embalm'd in russia stands a valued pile,
That time impairs not, nor foul worms defile ;
Russia, exhaling from its scented pores
Its saving power to these thrice-valued stores.
In order fair arranged the volumes stand,
Gay with the skill of many a modern hand ;
At the expense of sinew and of bone,
The fine papyrian leaves are firm as stone :
Here all is square as by masonic rule,
And bright the impression of the burnished tool.
On some the tawny calf a coat bestows,
Where flowers and fillets beauteous forms compose ;
Others in pride the virgin vellum wear,
Beaded with gold—as breast of Venus fair ;
On either end the silken head-bands twine,
Wrought by some maid with skilful fingers fine—
The yielding back falls loose, the hinges play,
And the rich page lies open to the day.
Where science traces the unerring line,
In brilliant tints the forms of beauty shine;
These, in our works, as in a casket laid,
Increase the splendour by their powerful aid."

THE FRONTISPICE.

The engraved frontispiece is designed to embody various specimens of ancient art. The one on the stand, to the left, is a representation of the binding of an Aldine Cicero of the sixteenth century, now in King's library, Cambridge. By the side of it, on the right, is shown the back and side of the "Manual of Prayers," belonging to Queen Elizabeth, described at page 83. Below, on the left, is a sketch of the binding of the "Acta Synodi Dort," in the British Museum, referred to at the seventy-ninth page; and to the right a specimen of the baass-bound volumes of the fifteenth century, from Lincoln cathedral.

BIBLIOPEGIA;

or,

BOOKBINDING:

Part II.

THE PRACTICAL ART OF BOOKBINDING.

THE
ART OF BOOKBINDING.

INTRODUCTION.

BINDING is the art of folding the sheets of a book, securing them together, affixing boards or sides thereto, and covering the whole with leather or other materials. There are various styles of binding, as *half-binding*, where the backs and corners only are covered with leather, and the sides or boards with marbled or coloured paper. *Law binding*, which is generally confined to law books, the leather being left its natural colour, and the edges of the leaves plain. *Dutch binding* is where the backs are of vellum or parchment. *In boards* signifies that the book is slightly done up, and covered with paper or cloth. The styles of binding for the various classes of literature are denominated by the titles of *filleted*, *lettered*, *gilt*, *half-extra*, *extra*, *super extra*, according to the quantity and style of work employed: thus we say *calf*, *morocco*, or *russia extra*, &c.

The trade of a Bookbinder has been ranked among the most difficult of the arts. It is incontestibly one

requiring much care, great neatness, correct taste, and attentive practice, to form a skilful workman, and without these requisites no one will ever attain the three great characteristics of good binding,—solidity, elasticity, and elegance. This will more particularly be felt by the binder in small towns, who from his situation, cannot possess the advantages which those of London, and other large cities, obtain. The country binder has generally to exercise the whole art, from the *folding* to the final operation required in binding a book; whilst his more fortunate brother of the capital, from his business being extensive enough to constantly employ *folders*, *sewers*, *marblers*, *gilders*, &c. has himself to execute what may be strictly called the binding only; viz. the FORWARDING and FINISHING. and even these are usually distinct branches. The appearance of the binding of a book, to a casual observer, seems to require little talent, but if the various subdivisions of the work, which form not less than sixty, are considered, and in the proper execution of which consists the Art of Binding, it will not be surprising to find how few men have arrived at eminence in it, arising from the obstacles presented in the acquisition of excellence in every department. Difficult, however, as the whole routine may be to attain, and numerous as will be the discouragements on first trial of critical parts, yet with constant application and rigorous observations with regard to the various minor manipulations required, as well as the more important details, the

attentive workman, whatever his situation, need not despair to reach perfection. To this end a clear and minute description of the various processes, in the order that they are employed in binding, will be given in the pages of this manual, uniting all that may be useful, not only to young and rising workmen, but to those considerably versed in the art. In the department of colouring leather, attention will be paid to present the best receipts, for though, according to the prevailing taste of the day, many of them are seldom uscd, still it is requisite that they should be known, as the fashion of another period may reintroduce the whole series of marbles and fancy colours; and even now many periodical publications are required to be bound to patterns executed thirty years ago. Some of the directions may, to the experienced, appear trivial or of no importance, but when it is considered that, by inattention to some part of the earlier stages of binding (such as being badly sewed, glued up, &c.) the beauty of all subsequent operations is frequently destroyed, they must be pronounced *all-important* to the character of any one zealous of the reputation of a good binder.

The various errors and defects in the many important operations required in binding, will be pointed out under their respective heads; and a careful attention to the rules laid down will soon enable any individual, moderately expert, to execute binding worthy of a place in any library. Let it never be lost sight of that the proper *forwarding* a book is

the great desideratum of all good bindings ; the general appearance of the gilding and other ornamental operations being merely subservient to it. The early binders were rigid on this point, as is seen by their statutes and rules, edition 1750 ; and so particular were they that their books should be well forwarded, that the thirtieth article enacts,— “Be it held that the master-binders do sew all their books with thread and real bands, do back them with parchment and not paper, and in case of infringement the said books shall be done again at the expense of the infringer, who shall besides be condemned to a fine of thirty pounds for each volume.” Solidity and elasticity are always found in the workmanship of the early binders, which has not been sufficiently observed by those of later times. Attention to these particulars has, however, of late been paid ; and aided by superiority in material, and the machinery now employed, a degree of solidity and elasticity, combined with a lightness and elegance of appearance, has been attained, which the most approved bindings of the fifteenth century do not possess.

Care is of the utmost importance when the book is valuable, either from its rarity, or the splendour of its embellishments, such works daily augmenting in price ; for if carelessly or badly bound, the re-binding, and consequent *cropping* the book down by recutting the edges, tends considerably to deteriorate it in value, a good margin being a primary object to

the genuine book collector. Many have contended that there is no occasion for this extra care in forwarding, since for a moderate sum other copies might be obtained, and thus the solidity and elasticity of the binding have been sacrificed to the general *coup d'œil* of the finishing. Let not the binder, however, hazard his reputation on the effect thus produced, which will not be lasting, but rather let it be his ambition to produce such work as will bear the test of examination in every part, opening with freedom, and presenting an appearance at once firm, square, and compact. Should the possessor of a library limit his binder to price, he will do well also to sacrifice a portion of ornament (which adds nothing to the durability), to the charge necessary to be made for extra care in the earlier stages. Let him not be tempted by an elegant marble upon the cover and upon the edges, by a border full of delicacy and taste, by a gilding that pleases the eye, or by the gold spread with profusion upon the edges, the back, and the sides, to the neglect of the more important details of folding, sewing, cutting, &c. Rather let him not limit the binder too closely, and then, if he employs an experienced workman, he will be certain of receiving the satisfaction he desires, when presented with a volume possessing every characteristic of good binding. The knowledge communicated in this treatise, it is believed, will enable any one fully to appreciate superior workmanship, and once properly understood, none but the best will ever be

satisfactory to the lover of his library. In the directions given, the amateur, who may take pleasure in devoting part of his leisure to an art interesting and amusing, will meet with all the information he may desire relative to the proceedings in use by the best binders.

The premises, presses, tools, and materials required by the bookbinder, are of much greater importance than, on first consideration, would be imagined. The great object in the former should be to procure as much light as possible, and with regard to presses, &c. unless they are of a superior kind, it will be impossible to execute binding in the first style of the art. These should be arranged with the greatest attention to convenience of situation, as much time will be saved from the facility with which the work will be executed, and from the additional neatness and beauty it will also acquire.

For the greater convenience of reference, and for properly distinguishing each branch of the art, a division into parts or sections has been deemed advisable. The technical terms will be found to have been adopted throughout ; and though one volume only is generally spoken of, it must be observed that it is usual to proceed with parcels of ten, twenty, or more volumes at a time.

PART I.

OF FORWARDING.

As the gathering of the sheets of a book, after they have been printed and dried off, is nearly always performed at the printer's, it will not be necessary to enter into any details on that subject, but to consider as the commencement of binding, the operation of

FOLDING,

which is of great importance, the beauty of a book depending on its being properly and correctly folded, so that, when it is cut, the margin of the different pages may be uniform throughout, and present no transpositions, to the inconvenience of the reader and deterioration of the work.

The various sizes of books are denominated according to the number of leaves in which the sheet is folded; as folio, quarto, octavo, 12mo, 16mo, 18mo, 24mo, 32mo, &c. Each form presents a certain number of pages, so disposed that, when the sheet is properly folded, they will follow the numeric order. In commencing the folding of any work, particular

attention should be paid, in opening out the quires or sets, to observe that the *signatures* follow each other alphabetically, and, if consisting of two or more volumes, that the whole of the sheets belong to the right one.

Although each form is folded in a different manner, it will not be requisite to detail the whole, as a description of the octavo and twelvemo will amply furnish an idea of the proper way of folding the larger and smaller sizes.

Octavo.—The sheets being placed on the table with the signature, which will be seen at the bottom of the first page, turned towards the table at the corner nearest to the left hand of the workman, will present pages 2. 15. 14. 3. below, and above, with their heads reversed, pages, 7. 10. 11. 6. (reading from left to right). The sheet is then taken with the left hand, by the angle to the right, and creased with the *folder* in the right hand, in the directions of the *points* made in the printing, taking care, by shading to the light, that the figures of the pages fall exactly one on the other, which will be 3 upon 2, and 6 upon 7, and thereby presenting uppermost pages 4 and 13, and above 5 and 12. The top part of the sheet is then brought down, with the left hand, upon the lower, pages 5 and 12 falling upon 4 and 13, directed properly, and again folded. The sheet then presents pages 8 and 9, which are then folded evenly, 9 upon 8, forming the third fold and finishing the sheet.

Twelvemo.—The signature to this size, when placed before the workman, should be at the top on his left hand, and towards the table, the sheet presenting pages 2. 7. 11., 23. 18. 14., 22. 19. 15., 3. 6. 10. On the right, pages 11. 14. 15. 10., are separated from the others by a larger space, in the middle of which are the points, indicating the proper place where the pages should be cut off. The *Folder* detaches this part, and placing page 11 upon 10 makes a fold, and 13 upon 12, which will be uppermost, finishes the folding of what is called the *inset*, and which bears the signature of the sheet it has been separated from with the addition of a figure or asterisk, as A5 or A*. The remaining eight pages are folded in the same way as the octavo, and when done the inset is placed in the middle of it, taking care that the head lines arrange properly.

Books are sometimes printed in what is called half sheets, but they are folded the same, after cutting them up; the octavo in the direction of the points, the twelvemo in *oblong* direction of the paper, and laying them apart from each other. There are also oblong octavos, which are folded in the middle in a line with the points, the second fold in the same direction between the heads of the pages, and the third on the length of the paper.

In the first fold of the octavo sheet is shown the manner of folding the folio, and in the second the quarto; the twelvemo also presents us with the eighteens, after the sheet is cut into three divisions:

little or no difficulty will be experienced in folding any other size that may occur, attention to the disposition of the pages and signatures being only required.

It will often be found necessary to refold a book which, previous to being bound, may have been done up in boards, sewed, or otherwise. This should in all cases be carefully attended to, after the book has been taken to pieces, the back divested of the glue and thread, and the corners or other parts which may have been doubled, turned up. This is usually done by examining if the margin at the head and fore-edge is equal throughout, bringing those to their proper place that are too short, and cutting those that are longer than the general margin. By these means an uniformity will be presented after the edges of the book are cut, which could never be attained if not attended to whilst the book is in this state.

The sheets of the book being folded, are gathered together, beat up between the hands on the table to bring them even, and then

COLLATED,

to see that the whole of the sheets belong to the same work and volume, and also that none are wanting. This is done by taking the book in the right hand by the upper corner of the fore-edge, and with the left, opening the sheets on the back and

letting them fall successively one after the other. The signatures will be thus seen in alphabetical or arithmetical order, as A. B. C. &c., or 1. 2. 3. 4. &c., to the last, which should always be examined to ascertain that it is the completion of the book. By these means any sheet incorrectly folded is also detected. Books in folio and quarto are generally collated with a needle or pricker, by raising the sheets singly from the table, but this practice should be resorted to as little as possible, as the work is liable to be damaged. If any sheet is wanting or belongs to another volume, or is a duplicate, the further progress of the work must be suspended, till the imperfection is procured or exchanged. Those that have been wrong folded must be corrected, and any *cancels* occurring in the work, cut out, and replaced by the reprints which will generally be found in the last sheet of the book. It is usual also with some binders to place any plates belonging to the volume, at this period, but as the liability of damage to them is great in the process of *beating*, it will be much better to perform that operation after the book is brought from the stone, for which directions will be given. The book being found correct, will be ready for the beating stone.

BEATING, PRESSING, &c.

The first operation is commenced by shaking the volume upon the stone by the back and head, so as

to make the whole even, and facilitate the division of it into as many equal parts, which are called *sections* or *beatings*, as may be judged necessary according to the thickness and other circumstances. A section is then taken and well beaten over, drawing it with the hand towards the body so as to bring the various parts successively under the hammer, and carefully avoiding striking more blows in one part than the other, except giving the edges a slight extra tap round. The section is then turned, and the like proceeding gone through; as also on each side after it has been separated, and the bottom part placed on the top, the middle of the section being thereby brought under the action of the hammer. This being done, the sheets are replaced in their proper order, and two or three taps with the hammer given to make them lay even. In beating those books with which, from their value, greater care is required, it is usual to place a guard or waste leaf of paper on each side of the section, to avoid any stains or marks which the stone or hammer might be liable to make.

It requires more skill than actual strength in beating, the weight of the hammer being nearly sufficient for many works. Attention must be paid to the hammer descending parallel to the surface of the stone, to avoid marking or cutting the sheets with the edge.

Before beating a book, care should be taken to observe if it has been recently printed, for if so it would *set off* by being beaten too much. This will

be easily ascertained by reference to the date at the foot of the title or by smelling the ink it has been printed with, which, being composed partly of oil, will not have got perfectly dry. This will particularly be the case with machine printed works. As, however, it is frequently necessary to bind a volume immediately after being printed, it will be requisite to take every precaution against its setting off, which would destroy the beauty of the work. It is the practice of some to put the book into an oven after the bread has been taken out, or into a stove heated sufficiently to dry the ink and make it search into the paper; but as these means are not without danger of getting the paper blackened or soiled, it is a better plan to interleave the sheets with white paper, which will receive all the ink set off. Should the sheets have been hotpressed, which is readily distinguished, this precaution will not be necessary.

When employed at the beating stone, the workman should keep his legs close together, to avoid *hernia*, to which he is much exposed, if, with the intention of being more at ease, he contracts the habit of placing them apart.

A rolling press has been invented as a substitute for the beating which books require previous to being bound. This will be fully described in the chapter on presses, where an engraved representation is given. Its operation is quicker and its power of compression greater, in a proportion of

five sixths. A boy sits in front of the press, and gathers the sheets into packets, by placing two, three, or more upon a tin plate of the same size, and covering them with another plate, the number of sheets depending on the stiffness and thickness of the paper. The packet is then passed between the rollers and received by the man who turns the winch, who has time to lay the sheets on one side, and to hand over the tin plates by the time that the boy has prepared the second packet. These machines have been introduced into offices of great extent, and from the economy of time and abridgement of labour, with the best results; but it is a question whether they will ever become general in those where the business is limited, and their use but little called for.

After beating, should there be any plates to the work, they, as before stated, must now be placed among the text. Great care must be taken to make the justification of the plates uniform with the text, by cutting off any superfluity at the head or back, and by placing them exactly facing the pages to which they refer, pasting the edge next to the back. Any that may be short at the head must be brought down, to preserve an uniformity. It is advisable to place a leaf of *tissue paper* before each plate, particularly when newly printed, as the ink of copper-plates is longer in drying than that of letter-press. When a work contains a great number of plates, which are directed to be placed at the end, they are

sewn on the bands by overcasting, which operation will shortly be treated of in full.

The book being now ready for pressing, is taken in sections, according to the work, and the judgment of the workman, and placed between pressing boards, the size of the volume, one on the other, and conveyed to the *standing-press*, which is pulled down as tight as possible by the *press-pin*. To compress them the more, a *capstan* or winch is employed.

After the book has been sufficiently pressed, it will be necessary again to *collate* it, to correct any disarrangement that may have taken place during the beating and pressing.

SAWING THE BACKS.

This operation is performed to prevent the bands on which a book is sewn, appearing on the back. After beating the book up well on the back and head, it is placed between two *cutting boards*, the back projecting a little over the thick edge, and tightly screwing in the *laying* or *cutting press*, the whole being elevated sufficiently to prevent the saw damaging the cheeks of the press. Then with a *tenant saw* the proper number of grooves are made, in depth and width according to the diameter of the band intended to be used, which will depend on the size of the book. A slight cut must also be given above the first and under the last band, for lodging the *chain* or *kettle stitch*. It is very necessary that

the saw should be held parallel with the press, without which precaution, the grooves being deeper on one side than the other, the work will present, when opened, a defect to the eye.

The *end papers*, which should consist of four leaves of blank paper, folded according to the size of the book, are now prepared and one placed at the beginning and end of each volume.

SEWING.

According to the number of *bands* wanted, must be attached to the loops on the cross-bar of the *sewing-press* (see Part V., on Presses, &c.), as many pieces of cord, of proper length and thickness, and fastened with the aid of the *keys* in the groove of the press as nearly equal in tightness as possible. When this is done the back of the first sheet in the book is placed against the cords, which must be moved upwards or the contrary to the marks of the saw, when the small screws at each end under the cross-bar must be moved upwards till the strings are equally tight. All this being disposed, the book is commenced sewing by placing the end paper, which has no marks of the saw, on the sheet before laid down, and sewing it throughout, leaving a small end of thread to form the knot, after sewing the first sheet, which is then taken from under and sewn the whole length.

There are various ways of sewing, according to

the size and thickness of the sheets of a book. A volume consisting of thick sheets, or a sheet containing a plate or map, should be sewn singly the whole length, in order to make the work more secure and solid. Great care should also be taken not to draw the thread too tight at the head or foot of the book, and to keep the back slightly swelled, the beauty of the binding depending much on this when the volume is backed.

When a book is sewed *two sheets on*, three bands are generally used. Taking the sheet and fixing it on the bands, the needle is inserted in the mark made for the chain-stitch, and brought out by the first band; another sheet is then placed, and the needle introduced on the other side of the band, thus bringing the thread round it, sewn in like manner to the middle band, and continued to the third, when taking again the first sheet, it is sewn from the third band to the other chain-stitch, where it is fastened, and another course of two sheets commenced, and so continued to the last sheet but one, which is sewn the whole length, as directed for the first sheet, as also the end paper. Three bands are preferable to two, the book being more firm from being fastened in the middle, which is the only difference in sewing on two and three bands.

Half sheets, to obviate the swelling of the back too much, are usually sewn on four bands, which admit of three on a course: the first sheet is sewn as in three bands, from the chain to the first band, the

next to the second, and the third takes the middle space; then the second sheet again from the third to the fourth band, and the first from thence to the other chain-stitch. The third sheet having only one stitch, it is necessary that, in sawing, the distance from the second to the third band should be left considerably longer than between the others. Quartos are generally sewn on five bands to make the work firmer, but if in half-sheets, as in the folio size, six or more are used, sewing as many sheets on as bands, giving each sheet but one tack or sewing, and piercing the needle through the whole of the course at each end or chain-stitch before fastening the thread. This, which gives sufficient firmness, is necessary to prevent the swelling of the back, which a less number of sheets in a course would make, and spoil the appearance of the binding.

When the book is composed of single leaves, plates, or maps; or as in the case of music, where, from the decayed state of the back, it is necessary to cut off a portion with the plough in the manner pointed out for cutting edges, the whole must be attached to the bands, by what is called *overcasting*. This is by taking a section, according to the thickness of the paper, and forcing the needle through the whole at the kettle-stitch, and on each side of all the bands, at a distance sufficient to secure the stitches from tearing, bringing the thread round each band as before directed, and fastening it at the end before proceeding with another course. To keep the whole

of the sheets properly even, the back is sometimes glued immediately after cutting, and when dry divided into sections. Atlases and books of prints, when folded in the middle, will require a guard or slip of paper to be pasted to them so as to allow them to open flat, which they could not do if attached to the back, and which would destroy the engraving. These guards must be of strong paper, about an inch in breadth, and folded to the right size. They are sewn by overcasting, as above directed.

The old mode of sewing on raised bands combines many advantages. This style is still adopted with many works, particularly those with limited margins. When the book is sewn on raised bands, it is only necessary to mark the place for the chain-stitch, and sew backwards over the cords to prevent the thread tearing the sheets, which it would if brought out on the near side of the bands. Folios and half-sheet quartos are generally sewn in this manner, in consequence of the inequality of the margins at the head, which are thus arranged properly by bringing the top line even with a band attached to the sewing press as a guide. The defective parts are then removed when the book is cut.

It was proposed by *M. Lesne*, bookbinder of *Paris*, in a Memoir presented by him to the "Société d'Encouragement," January 18, 1818, that in order to give to books the three essential qualities of binding, elasticity, solidity, and elegance, they should be sewn similar to the Dutch method, which is on

slips of parchment, instead of packthread; but to remedy the inconvenience arising from one slip being insufficient to make the back of a proper solidity, as well as being liable to break, and if doubled or trebled, presenting a bad effect on the back when covered, he suggested the adoption of silk for the bands, which in a much less diameter is far stronger than packthread double the thickness. It is also preferable for sheets that require sewing the whole length, to use silk; this being much stronger than thread, and insuring a greater solidity to the work.

The effects produced by the adoption of this style may be seen in the bindings of the finer class of Bibles, Prayers, &c., of the present day, which are sewn on very fine and strong cord with silk. It will be observed that the cuts of the saw, apparent in other bindings, are not seen in opening the volume; the bands form an ornament to the back, and each sheet revolves thereon as upon a hinge, the inner margin being preserved its full size, and the elasticity and freedom of the volume much increased.

When the volume is entirely sewn, the screws are loosened, the cords detached from the keys, and about two inches of the cord left on each side of the book to attach the boards that are to form the sides.

INDIA RUBBER BACKS.

This recent invention has been principally employed in Stationery Binding, but as it is applicable to all kinds of work, those who may wish to avail them-

selves of it will find a detail of the process in Part III.

PASTING THE ENDS, GLUEING THE BACKS, &c.

The book being taken from the sewing-press, the two outside leaves of the end papers are pasted together to give additional strength to the joint when pasted down, and to hide any defects or stains in the boards, which, if single, would show through. When the volume is a folio or quarto, it is usual to paste the remaining two leaves in the same way, the largeness of their size requiring a greater consistency. But when the book is to be bound in an expensive manner, marbled or coloured ends must be pasted in. These are cut and folded in the same way as before directed, the coloured or marbled side being folded inwards. The book is then placed before the workman with the fore-edge towards him ; the first leaf of the plain end paper is opened and laid back, and one of the coloured ones placed about half over the second, with the back or fold towards him ; it is pasted equally over, as well as the half of white not covered, and then turned, fixed evenly and closely to the back, and rubbed smartly to make it adhere. The first leaf is then again brought over, and serves as a guard until the coloured one is pasted to the board. Attention should be paid, that such papers only, as will blend well with the colour of the leather intended for the cover, are used.

If a joint in calf or morocco is required, it should always be uniform in colour with the cover, and pared on the edges to reduce the thickness a trifle. This joint should be about two inches broad, and folded in the middle after being pared. It is pasted on the white end paper on the side towards the groove, the other part not being pasted to the board till the book is covered. For additional strength where the book is heavy, it is usual also to sew the joint with strong silk to the bands.

These matters being adjusted, the whole end paper must be turned from the back, the edge of the fold slightly but evenly pasted with the finger, and returned again, taking care to affix it close to the back. The strings on which the book has been sewn must be pulled tight, and a little from the back, so as to avoid pressing on the end paper and bearing it off. Some workmen do this previous to pasting the ends; but from its being liable to tear near the bands and chain-stitch, unless thoroughly dry, the mode of proceeding here described is much better.

The book is now taken between the hands and well beaten up at the back and head on a smooth board, to bring the sheets level and square, as the beauty of the book in all the subsequent operations of binding, depends on the care and attention paid in this place. The volume is then held firmly by the fore-edge with the left hand, the back, if not exceeding the width of the front, swelled a little with the fingers of the right, and glued equally over.

Should it be a volume of large dimensions it will be necessary to place it between boards, and put it lightly into the laying press, taking care that the sheets are even on the back, and the volume equal in thickness throughout the whole length. It is then laid on a board to dry, but must not be placed before the fire, as by so doing the sheets are liable to start from the back, and the strength of the glue to be much diminished.

The back being dry, the bands on which it is sewn, and which are intended to be laced in the boards, must be opened with a bodkin and scraped with a dull knife, so as to bring them to a point, and make them more convenient to attach to the boards which are to form the side covers.

BACKING.

In commencing this operation, which is done to form the groove for the reception of the boards, the book is placed upon the laying-press with the fore-edge towards the workman. The left hand should then be placed flat and open upon it, the thumb on the fore-edge ; with the four fingers the leaves must be drawn forwards, and with the right hand, the back beat lightly on the edge with the *backing-hammer*, to give it a circular form. Both sides being thus rounded, one of the *backing-boards* is placed upon the volume at an equal distance from the back, according to the groove required for the board ; then

turning the volume, the other is placed in a similar manner, and the whole put carefully into the press, the lower edge of the boards even with the cheeks of the press, and screwed with the *press-pin* as tight as possible. With the hammer the back is then beaten firm and round, which causes the boards to form the groove on each side, by the projecting over of the part left above. Should the glue on the back have become too hard, or be too strong, it will be advisable before backing to damp it with a moist sponge. When the volumes are large, or plates attached to guards, the back, which bears the whole stress of the volume, should in every operation have all the strength given to it possible, and in the backing more particularly than any other.

BOARDING.

The milled boards used for covers being of various dimensions, similar to the sheets of paper, are cut according to the size of the book, in the same way as the end papers. The board is divided with the *compasses*, each part serving for one side of the cover. It is then marked in the direction of the points made by the compasses, with a bodkin and rule, and cut in the direction of the marks with the large *shears* fastened in the laying press. The side of the boards intended to be placed next the groove is then cut smooth in the press with the *plough*, and if intended for extra work, the paper is generally pasted on the

side, which gives the board additional firmness. This part of the preparation should be done during the time the back of the book is drying, and previous to opening out the bands.

The boards lined with paper, as before directed, being dry, the volume is taken and one end of the compasses placed in the groove, and the other extended towards the fore-edge, to the extreme point the leaves will bear cutting, so as to present a firm and smooth edge. After allowing sufficient for the square of the board in front, the prepared boards must be marked at each end, and the rough part cut off with the plough in the same manner as previously done to the edge next to the groove. One board is then placed on each side of the volume, even at the head, and marked with a bodkin opposite to the slips intended to be laced in; a hole in a vertical position is then made through the board, and being turned, another in the same way near to the first. The bands having been pasted and passed in above, are returned through the other hole, and being pulled tight, the boards will necessarily be perpendicular to the back, and confined in the groove. After cutting off the end of the strings near to the lace holes, they must be beaten well and evenly into the board, by placing the under part on an iron (called the *knocking-down iron*), fixed at the end of the laying-press, and beating above with the backing-hammar.

If it be desirable that the bands should not be seen inside, the whole may be so vertical, that by placing

the bodkin in the same on the other side, another verging a contrary way to the first may be made, and the band being passed in this one continued hole, will not be seen underneath. The liability, however, of its tearing out is an objection, and from this cause, the common way, with care in beating down, is preferable.

The volume is next placed between the pressing-boards, and put into the *standing-press*, which must be screwd tight and evenly down. The back is then damped with paste, and according to the firmness of the sewing and book, grated and scraped, and finally rubbed smooth with paper shavings, and left to dry in the press for as long a time as possible. If a large volume, it is usual to apply a little glue to the back. When taken out of the press, the boards must be disengaged from the end papers, where they adhere, so that they may move freely up and down in the cutting.

CUTTING THE EDGES.

The manner of preparing the volume for cutting is very important, as a swerving from right angles in cutting the head will present a disagreeable appearance, not only at the head but the tail also, which being compassed from it, will display the same defect. The top and bottom of the back should be at right angles from the back, and the fore-edge parallel to it. To perfectly insure this, it is better to use the *square*,

applying the edge to the front side of the board, and marking the quantity necessary to be cut off at the head, leaving all the margin possible. The boards of the book are then drawn down, and the volume placed, with the back towards the workman, on a cutting board in the left hand ; the *runner* or smooth edged board is then fixed on the other side, with the right hand, even and square with the line above directed to be made, and the whole held tight with the left hand, put into the cutting-press, to the level of the right hand cheek of the same, taking care that the volume hangs perpendicular to the cheeks of the press. Being screwed tight with the pin, the workman then takes the plough, with the right hand, by the head of the screw, and placing it on the groove of the press, proceeds to cut the book, holding the other end of the screw firmly with the left hand, and causing the knife to advance gradually through the book, by turning the screw gently as he cuts, which should be all one way, viz. as the arms are removed from the body. The plough must be held firm in the groove, or rods of the press, to prevent the knife jumping or cutting the edges uneven, and should the knife be found to run up or down, the defect must be remedied by removing some of the paper or boards placed under the knife where it is fastened to the plough. If there should be none required to bring the knife even with the plough, then a piece must be placed on whichever side of the *bolt* the defect may require.

The head being cut, the book is taken out of the press, and the quantity to be taken off the tail marked with the compasses. For this purpose the book is opened, and search made for the shortest leaf, which is measured by placing the thumb of the left hand against the edge of the head, and applying against it one of the points of the compasses, carrying the other so much over the end of this leaf as will allow for the square of the boards at the head and tail. Then shutting the book, the distance is marked near the back and fore-edge on the board. To be more correct, a line may be marked from the two points made, and the square will detect any error that may have been made in cutting the head. The boards are then drawn equally over the head of the book to the distance allowed for the squares, put into the press, and cut at the tail.

Much precaution is necessary in cutting the fore-edge. Mark the book with a bodkin on the projecting part of the end papers, and on each side, at the head and foot close to the square side of the boards, drawing a line from one to the other. Then laying the boards open, the leaves must be tied near to the back by winding a piece of fine cord several times round from the head to the tail, to prevent the leaves returning after the back is made flat to form the gutter on the fore-edge. This done, beat the back flat on the press, and place one of the cutting boards at the end of the book, even with the line before made; turn it, and place the runner as much

below the line on the title side, as has been allowed for the square on the fore-edge. Taking the whole in the left hand, the volume must be examined to remedy any defects, should it not be regular and equal on both sides, and then put into the press, the runner as before even with the right cheek; taking care to keep the other board projected above the left, equal to the square allowed in front, so that, when cut through, the fore-edge may be equally square with the boards on each side. To make the larger volumes flat on the back, it is usual, after tying round, to put them by the fore-edge loosely in the press, the boards resting on the cheeks, and beating the back slightly with the hammer. After the fore-edge is cut, the string is taken off, the back resumes its circular form, and the edge in consequence presents a grooved appearance, which is called the *gutter*.

The above method is termed *cutting in boards*; but as it is not necessary to cut school books and common work in boards, on account of their thinness, it is usual to cut a number of them together on the fore-edge, round the backs, press them a short time, cut the heads and tails, colour or sprinkle the edges, and then back them. The boards are afterwards marked, holed, &c., as before directed, and, if not before squared with the plough, cut square with the large shears, the edge of the book being the guide. This is called *cutting out of boards*.

COLOURING OF EDGES.

Colouring the edges with one colour, equally sprinkling over, marbling, and gilding, come under this head; and though the latter two are in large towns distinct trades, from their being intimately connected with the business of a binder, and necessarily performed by those in smaller places, it is important that they should be treated of in this place, being, as before observed, considered best to speak of each operation as required to be employed in binding. The style of ornament of this description must depend on the price allowed for the work, and will vary according to the taste of the workman and wish of the employer.

OF COLOURING AND SPRINKLING.

The colours most used are blue, yellow, and brown, and for old books, red, in preparing which, it is necessary to grind them in water very fine on a slab with a muller. Each colour is then placed in a separate vase, and mixed up with a little paste and water to the proper consistency for use. To procure a better edge, two drops of oil, and about an equal quantity of vinegar and water may be mixed with the paste.

In colouring the edges equally over, the boards at the head of the volume must be beat even with the

edges, and the book rested on the edge of the press or table, then holding the book firm with the left hand, the colours must be applied with a small sponge, passing it evenly upon the edge, proceeding towards the back one way and the gutter the other, to avoid a mass of colour being lodged in the angle of the fore-edge. This done, the other parts are similarly coloured, the fore-edge being laid open from the boards, and a runner held firm above to prevent the colour searching into the book. It will be perceived that a dozen volumes may be done at the same time with scarcely more than the additional trouble of placing one above the other. For further security, and to prevent the colour searching into the books, it may be advisable to put them into the laying-press, and screw them moderately tight.

In sprinkling, it is usual to tie together a number of volumes, with a board on each side of the outside books, or place them in the laying-press, first with the fore-edge upwards, then with a large brush, similar to a *painter's*, dipped in whatever colour may be wished, and well beat on the press-pin over the pot till the sprinkle becomes fine, the edges are covered; the pin and brush are held sufficiently above the book, and the edge sprinkled by beating lightly at first, and stronger as the brush becomes less charged with colour, being careful that the spots are as fine as possible, the sprinkle being thereby made more beautiful. Several colours are sometimes used with very pleasing effect; some of these com-

binations will be described, and many others will readily occur to the workman as his taste may suggest.

COLOURS.

Of vegetable colours, and ochres, directions for mixing which have been given above, it will only be necessary to particularize the most approved and generally used substances; the liquid ones will require a more lengthened description.

BLUE.—Indigo and Prussian Blue, with Whiting for lighter shades.

YELLOW.—Dutch Pink, King's Yellow, and Yellow Orpine.

BROWN.—Umber, burnt over the fire.

RED.—Vermillion; or Oxford Ochre, burnt in a pan.

PINK.—Rose Pink; to make it brighter, add Lake.

GREEN.—The first and second mixed to any shade.

The liquid, or spirit-colours, will be found best for use, as the edges will not rub, which all other colours are liable to do. Some of the receipts are well known; but it being necessary to give a faithful record of the art, the whole of the colours used, and modes of preparation, will be presented.

BLUE.

Two ounces of the best Indigo, finely powdered, mixed with a teaspoonful of spirit of salts, and two

ounces of best oil of vitriol. Put the whole into a bottle, and let it remain in boiling water for six or eight hours, and mix with water as wanted to the shade required.

YELLOW.

French berries, saffron, or faustic chips. Boil with a small portion of alum, strain and bottle for use.

GREEN.

The two colours above will make an excellent green, used in porportions as the shade required. Another green may be made by boiling four ounces of verdigris and two ounces of cream of tartar till a good colour is produced.

ORANGE.

Two ounces of Brazil dust, one ounce of French berries, bruised, and a little alum. Boil in water and strain.

RED.

Brazil dust, half a pound ; alum, two ounces, well powdered ; boiled in a pint of vinegar and a pint of water till brought down to a pint. Strain and bottle.

PURPLE.

Logwood chips, in a porportion of half a pound to two ounces of alum, and a small piece of copperas, boiled in three pints of soft water till reduced a third, will make a good purple.

Brazil dust, submitted to the action of strong potash water, will make a good purple for immediate use, but will not keep.

BROWN.

A quarter of a pound of logwood, and the same quantity of French berries, boiled together. If a darker is required add a little copperas.

With these colours, the edges of books may be sprinkled to almost an infinite number of patterns. A few will be given; for though fancy sprinkles are seldom used where the binder can get the edges of extra books marbled, they will be of use to those who would find marbling a work of too great preparation and expense for a small number of books.

RICE MARBLE.

This pattern has been so called from the use of rice, but linseed, or bread crumbs will answer the same purpose. The rice is laid on the edge of the book according to fancy, and the edge sprinkled with any colour, the rice thus forming blank spaces. The edge may be coloured previously all over, or sprinkled with a lighter shade.

WHITE SPOT.

Take white wax and melt it in a pot, then with a brush throw some upon the edge of the book; when it is set, colour the edge with a sponge. Take

the book and give it two or three smart knocks on the end of the press, when the wax will fly off, and a beautiful white spot remain. This pattern may be much varied by using two or three colours, or sprinkling the edge before the wax is thrown on, and after it is, again with other colours.

Whiting mixed with water to a thick consistency, will nearly answer the same purpose, and is less expensive than wax.

FANCY MARBLE.

Take a small portion of rose-pink, green, or any other vegetable colour, and well bray it on the slab with the muller, till reduced to a fine powder. Prepare a dish, or other vessel, large enough to admit the fore-edge of the book, and filled with clear water; then with the *paletto knife* mix a portion of the colour with spirits of wine, and convey with the knife some of the same to the middle of the vessel, and allow it to flow gradually on the surface of the water. The spirit of wine will cause it to spread in a diversity of pleasing forms, when the edge of the book must be dipped in the same manner as for marbling, and a very neat pattern will be produced at a trifling cost, as no more colour need be mixed than wanted at each time.

GOLD SPRINKLE.

After the edges of the book are stained with any of the colours above described, a good effect may

be given by sprinkling with a gold liquid, made in the following manner:—Take a book of gold and half an ounce of honey, and rub them together in a mortar until they are very fine: then add half a pint of clear water and mix them well together; after the water clears, pour it off and put in more, till the honey is all extracted and nothing left but the gold; mix one grain of corrosive sublimate with a teaspoonful of spirits of wine, and when dissolved put the same, with a little thick gum-water, to the gold, and bottle it, always shaking it well before using. When dry, burnish the edge, and cover it with paper till the work is finished.

MARBLING EDGES.

This is an operation requiring much care and attention in the preparation of every article used, for if any part be faulty, it is impossible to make a good marble. The tools and utensils that will be required are—a trough, perfectly water-tight; a little round stick; a comb; an earthenware cup for each colour and the other preparations; a small brush for each; and a marble slab and muller to grind the colours. A little stove is also desirable for burning such colours as may require it; but as this can be done in a pan on the fire of the office, it is not essential.

The shell, Spanish, and Anglo-Dutch marbles will alone occupy attention here, being those used

for book edges; but the description of the Dutch marble will be reserved for the part on Stationery Binding, in which department it is now only used.

The Size.—Put into a pipkin, or other vessel, a quantity of linseed, and pour over it boiling rain water, stirring the same round with a stick or piece of birch, till the size is of sufficient consistency to bear the colours on its surface. Should it be too thick, which a trial will enable the workman to judge, add more water, and if the contrary, more seed. The latter should be obviated as much as possible, by not putting too much water at first to the seed, as the size getting cool will have little effect on what may be afterwards added.

The Wax.—Cut a little bees-wax of the purest quality into small pieces, and place in a vase on a slow fire till melted; then pour gradually to it spirits of turpentine, stirring them together till they acquire the consistency of honey.

The Colours.—For marbling, mineral colours, strictly speaking, should never be used, as, being too heavy, they will sink to the bottom of the size. The vegetable colours and ochres, particularized at page 238, are the most proper, to which may be added two others, *Ivory black* and *Flake white*; though the latter will be seldom required, the size left uncovered by the other colours generally forming sufficient white. These must be ground in *rain* water as fine as it is possible; the excellence of the marble depending much on the clearness of the

colours. Two or three drops of the prepared wax above described, according to the quantity of colour to be ground, must be well worked in during this operation. The effects of the wax will be to stay the colour and produce a much finer edge when submitted to the action of the *Burnisher*.

THE SHELL MARBLE.

Put a little of each of the colours as above prepared into separate cups, and add thereto a small portion of *ox-gall* and water, mixing them well up with the brush appropriated to each colour. This will be all that is necessary for the vein colours, or those intended to be thrown first on the size. To the upper ones, which drive the former into veins, and which are to form the shell, add two or three drops of *boiled linseed oil*, and mix well with the brush, so that it is fully incorporated with the colour.

The size must then be poured cold into the marbling trough, very carefully, to prevent any of the seed accompanying it, and experiment made with the colours to see if they act properly. A small portion is taken in the brushes, and thrown on the size by gently tapping against the fore-finger of the left hand, in the order it is desired to use the colours. Should they not spread over the surface sufficiently, more gall must be added, and if the contrary, more unmixed colour. The same must be done with the upper colours, as respects the oil; if on trial the shell should not be sufficiently developed, and the opposite if

the oil causes white spots, or breaks. These trials must be made by taking the colour off with blank paper.

The colours acting properly, the first must be carefully thrown on, then the second, third, &c., till the whole of the surface of the size is evenly and completely covered. To give an example, which will answer for any other pattern, an edge to correspond with the end papers (generally the case) of a green pattern, having blue and yellow veins, is desired; one of the latter colours is thrown on, and then the other, both prepared without oil; and finally the green, having oil to form the shell, in such manner as to completely cover the surface till the blue and yellow are driven by it into an endless variety of veins. All being thus disposed, the marbling is commenced by beating the boards at the head even with the edge, and holding the leaves together, dipping them into the size. Withdrawing it immediately, the size adhering to the edge with the colour must be shaken or blown off as speedily as possible, to prevent its running into the book. The tail is next dipped in a similar manner. Before marbling the fore-edge the boards must be laid back, and the edge flattened on the press, holding the leaves firmly together at each end, taking the colour with the same precautions, and replacing the boards immediately after dipping. It will be necessary, previous to throwing on the colour for each dipping, to clear the size of all the colour left on the surface from the previous one, by taking it well off with waste paper.

An infinite variety of marbles might be added, but as the proceedings are the same as above described, the workman will be perfectly able to execute any pattern that circumstances may demand, attention to the ground and body colours, and the order in which they are used in the pattern, being only required.

SPANISH MARBLE.

This marble has for some years been very fashionable, almost superseding the above altogether. To form this edge, the colours must be thrown on in a similar manner, and the dark and light shades peculiar to it, formed by marbling the volume gradually, instead of submitting the whole surface at one time, as directed for the shell marble. The top colour must have more gall than for the shell marble and less oil. The effect is produced by dipping the edge about an inch, then drawing the volume slightly forward, which forms a darker shade, dipping another inch, and so on to the end. The taste of the workman, or the colours of the end papers, will suggest the space proper to dip at one time.

ANGLO-DUTCH MARBLE.

The proceedings to be observed in this pattern, now also much in use, are the same as to the preparation of the colours, with the addition of a little spirits of wine. Should the pattern present numerous spiral forms, the colours must be directed with a pointed stick into volutes, by turning them at

such distances as may be required. But if the pattern is of a jagged form—that is, the colours running into each other, they must be laid on the size with quills, or bent pieces of brass latten, as in the Dutch marble, and the pattern formed with a comb made for the purpose. This is done by drawing the teeth of the comb across in various ways, which causes the body and vein colours to take a jagged form, according to the distance of the teeth one from the other.

The result of many years' experience produces confidence in asserting that the directions here given for executing the department of marbling, on which subject so much error has been propagated, may be fully relied upon for producing the effect desired. The proceedings may appear plain and simple; they are so, but without great care and observation the workman's labour may be entirely lost. *Bad* gall, *hard* water, and other things that, until experience has taught better, may appear trivial, will not fail to cause the worst results, and the labour of a day in preparation will thus be thrown away perhaps, for the want of a little attention to minor particulars.

As a step to the attainment of mastery in the art, let the workman divest himself of the various *nostrums* he has been put in possession of by *interested* parties, and give himself up with assiduity to the directions above laid down; he will soon find, though failure, from some of the causes alluded to, may at first, and will at times, take place, ultimate success attend his endeavours.

GILDING THE EDGES.

This description of edge is the best preservative against external injury and damp. The fore-edge of the book is first gilt. It is screwed as tight as possible between boards placed even with the edge in the laying press, and the first operation is commenced by scraping the edge perfectly smooth with a steel scraper, round on one side and flat on the other, for the better execution of such parts as present slight inequalities of surface. After the edge is well scraped, it must be *burnished* with the agate, then coloured over with red bole or chalk, ground in soap, rubbed immediately dry with fine clean paper shavings, and again well burnished. This gives a deeper appearance to the gilding, and hides any slight defect that a white edge at times presents.

The gold is next cut on the gold cushion to the size required, and each piece taken off with a small slip of paper folded with one smooth edge, or an instrument called a tip, by rubbing it on the head and attaching the gold by gently pressing upon it. The *size* (prepared with the white of an egg in three times the quantity of water, well beaten together) must then be applied evenly on the edge with a large camel's-hair pencil, and the gold immediately placed thereon. Should any breaks appear in the gold, other portions must be applied with a piece of cotton wool.

A size made of writing parchment, applied warm, with six or eight drops of vitriol in a cup full of the size, is used by some gilders, but the former being more simple, and equally effective, will be found preferable.

After the edge is dry, it must be burnished lightly and carefully to avoid rubbing off any of the gold; and to insure this the better, a piece of tissue paper should be placed on the edge during the first operation. After this burnish on the edge itself until it is perfectly uniform and clear. The head and tail of the volume must be gilt with the same precaution, the back towards the workman.

Should the work be of that nature that it is desirable to give it the character of the period in which the book was written, or an additional degree of beauty and elegance, this part of book ornament may be pursued farther in the manner we shall now describe.

GILDING A LA ANTIQUE.

After the edge is finished as above directed, and before taking out of the press, ornaments, such as flowers, or designs in compartments, must be stamped upon it in the following manner. A coat of size is passed quickly over with great precaution and lightness, and only once in a place, to avoid detaching any of the gold. When dry, rub the edge with palm oil, and cover with gold of a different colour to the first; then with tools used in gilding leather,

warmed in the fire, proceed to form the various designs by firmly impressing them on the edge. The gold that has not been touched by the tools is then rubbed off with a clean cotton, and there remains only the designs the tools have imprinted, which produce a fine effect. This mode is, however, now seldom used, though almost all the books in the original binding of the sixteenth century are so executed.

GILDING UPON MARBLED EDGES.

This edge, which Dr. Dibdin, in his *Bibliographer's Decameron*, calls "the very luxury, the *ne plus ultra* of the Biblioegistic Art," is one requiring great care and expertness in the execution. After the edges have been tastefully marbled, and not overcharged with colour, the book must be put in the press, and well burnished as before directed. The size must then be laid lightly on, to prevent unsettling the colour of the marble, by which the edge would be destroyed, and the gold immediately applied, and finished off as in other edges. When dry the marble is perceived through the gold, and presents an appearance of great beauty.

GILDING ON LANDSCAPES, &c.

When the edge is well scraped and burnished, the leaves on the fore-edge must be evenly bent in an oblique manner, and in this position confined by boards tied tightly on each side, until a subject is

painted thereon in water colours, according to the fancy of the operator. When perfectly dry, untie the boards and let the leaves take their proper position. Then place the volume in the press, lay on the size and gold, and when dry, burnish. The design will not be apparent when the volume is closed, from the gold covering it, but when the leaves are drawn out it will be perceived easily, the gilding disappearing and a very unique effect be produced. The time and labour required makes this operation expensive, and consequently very seldom performed. It is, however, considered necessary to describe the proceeding, as the taste or wishes of some may render it necessary that the workman should know how to operate.

After the volume is gilt, the edges must be enveloped in clean paper, by pasting lightly the extremities one upon the other, to preserve the edges from injury in the subsequent operations. This is taken off when the volume is completed.

BLACK EDGES.

Books of devotion are generally bound in black leather, and instead of being gilt on the edge, blacked to correspond with the covers. It will therefore be necessary in this place to describe the process.

Put the book in the press as for gilding, and sponge it with black ink; then take ivory black, lamp black, or antimony, mixed well with a little paste, and rub it on the edge with the finger or ball

of the hand till it is perfectly black, and a good polish produced, when it must be cleared with a brush, burnished, and cased with paper.

HEADBANDS AND REGISTERS.

The *headband* is an ornament in thread or silk, of different colours, placed at the head and tail of a book on the edge of the back, and serves to support that part of the cover projecting above in consequence of the squares of the boards, giving to the volume a more finished appearance. Thus it will be seen that the headband must equal the square allowed for the boards. For common work the headband is made of paper well rolled between two boards, and slightly pasted to hold the paper firm; but for extra work, and volumes requiring greater durability, it is made of thin board and parchment pasted together and cut into *stripes* of the breadth required. These flat headbands produce a much better effect than the round ones.

There are two kinds of headbands, viz. single and double. For ordinary work, cloth pasted round the band or common thread is used; for *extra*, silk and sometimes gold and silver thread. If the volume is small it is placed, with the boards closed and drawn down even with the edge, between the knees; or, if larger, placed at the end of the laying-press, with the fore-edge projecting towards the body of the workman.

SINGLE HEADBAND.

Take two lengths of thread or silk, of different colours, threading one in a long needle, and tying the ends of the two together. Supposing red and white to have been taken, the white attached to the needle, it is placed in the volume five or six leaves from the left side, and forced out on the back immediately under the chain-stitch of the sewing, and the thread drawn until it is stopped by the knot, which will be hid in the sheet; the needle is then passed a second time in or near the same place, and, after placing the prepared band under the curl thus made, the thread is drawn tight, so as to hold it firm. Before placing the band it must be bent with the fingers to the curve of the back of the book. The red thread is now taken with the right hand, and bringing it from the left to the right, crossed above the white thread, passed under the band, and brought round to the front again, and fastened by passing over it, in the same way, the white thread, taking care that the *bead* formed by these crossings touch the edge of the volume. In repeating thus alternately the operation, crossing the two threads, and passing each time under the band, which is thereby covered, it must be occasionally fastened to the book by inserting the needle as before directed, once in as many places as the thickness of the book may require, and giving it a double tack on the right side on completing the band, fastening it on the back with a knot. These

fastenings give firmness to the headband and the exact curve of the back. The two projecting sides of the band must be cut off near the silk, giving the band a slight inclination upwards, to prevent the work slipping off before covering.

DOUBLE HEADBAND.

This headband is made of silk of various colours, and differs from the single, both in being composed of two bands, a large and small one, and in the manner of passing the silk. It is commenced in the same way as the single, but when the bands are fastened, the smaller above the larger, the red silk is taken with the right hand and passed above the white, under the bottom or larger band, brought out under the upper or small one, carried over it, brought out again over the large band, and the bead formed as above directed, near to the edge of the book. The white silk is then passed in the same way, and so on alternately till the whole is completed.

GOLD AND SILVER HEADBAND.

Both single and double made as above, the only difference being in the use of gold or silver thread. Great care must be here observed in tightening the thread at the bead.

RIBBON HEADBAND.

This style varies but little from the other, the same coloured thread being only passed several times

round, instead of alternately with the other, and making the bead at each turn, taking care that the under thread is not observed, and then passing the other colour in a similar manner, as many or more times than the former. This will produce a band, from which it is named, having the appearance of narrow ribbons, of various colours. Three or more colours may be used in a pattern.

REGISTERS.

For those volumes which require only narrow ribbon, registers are not placed till after the completion of the binding; but for those of a larger size, being much used, it will be necessary to attach them under the headband, and glue one of the ends on the back of the book, bringing the others down between the leaves, and turning the parts intended to hang out at the bottom into the book again, to preserve them from being soiled, till the work is finished. For books handsomely bound, such as Altar Services, &c., gold fringe is sometimes affixed to the ends of the registers, which adds to the general effect of the ornamental part of the binding.

OPEN BACKS, BANDS, &c.

The practice of cutting off the corners of the boards next the headbands is now nearly discontinued. Should it, however, be desirable to do so, they must be cut slopingly off from the outside to

the board placed under, to prevent injury to the back and edge. Cutting a piece off straight through with the shears, produces a bad effect when the end paper is pasted down. In *lining the back* the volume is placed by the fore-edge in the laying press, and the back glued lightly. A piece of cartridge paper is applied thereon, one edge level with the side, and evenly rubbed with the folding-stick, creased on the other side, and cut off. The book is then taken out of the press, the projecting paper cut off with the shears at the head and tail, the headband rubbed close to the back, and the back again slightly glued. If wished stronger, another fold must be glued on before cutting off. When a loose back is required, to allow the book to open with greater freedom, it will be necessary to glue the paper on as above, leaving projecting over so much as will exactly cover the back. Then fold the part so left evenly by the edge, and in like manner bring over the other part, which must be cut off evenly on the opposite edge. The two parts being glued, must then be rubbed well together, and the headband set with the folder. If it is wished that the volume should have raised bands, the back must be marked at equal distances with the compasses, or by means of a pattern cut out in pasteboard, when glueing again the back the bands must be placed. These bands are generally cut out of a piece of firm thick leather or pasteboard. When the glue is dry, cut off the part of the bands projecting over the sides, as also, when

open backs, a short space down each fold of the paper, to admit that portion of the cover necessary to be turned in at the head and tail.

COVERING.

The skins prepared for binding are dressed in a peculiar manner; they are soft and of equal thickness throughout. The cutting out of covers is an important operation, as by attention much economy may be effected. For this purpose patterns in paste-board of all the sizes of books should be made, and such as are required placed on the skin, turning them every way so as to obtain the greatest number of pieces possible, allowing about half an inch round for paring and turning in. Should the books be of the same size, a volume taken by the fore-edge and the boards laying open on the leather will enable the workman to judge to a nicety the most advantageous way to cut. The narrow pieces, &c., left on the sides will do for the backs and corners of half-bound work. Sheep-skin and calf for common binding should be steeped in clear water and well squeezed out, then stretched and extended on the table, the smooth side upwards. For law books the leather must be cut out dry, damped with a sponge, and the covers laid one on the other to preserve their moistness, taking care not to twist them, which would present marks in the binding. This plan is advisable for all extra calf work, the colours taking

better and far more uniformly. Morocco and roan must not be wetted, as it would destroy the grain and stain the leather. Russia must be well soaked with warm water, but care taken to avoid creasing. It will also require to be well rubbed out on the table with the folder.

Each cover must be pared round the edges with a long knife, called the paring-knife, on a fine marble slab, by extending it, the smooth side below, and taking off the flesh side by moving the knife forward diagonally from about half an inch of the edge gradually down to it. The cover must be held firm with the left hand, and care taken not to cut through the cover before reaching the edge; but practice will soon render this easy. To obviate the difficulty which morocco and roan present in paring, from not being wetted, it is usual to slightly moisten the edges on the rough side of the leather. This is also sometimes done to rough calf, that is, where the leather is dressed on the flesh side of the skin, and more particularly used in stationery binding.

Whatever may be the substance or material with which a book is covered, the manipulations are the same. It is well pasted over with the brush and placed on the volume in the same way, care being taken to preserve from stains those that are costly and delicate, particularly morocco and silk, which will be again alluded to. If the covers that have been wetted before paring have become dry, they must be again sponged with clear water. They

should then be placed on a board, and the side of the skin which is to be applied to the volume, pasted well and evenly upon the surface, leaving no more than what is necessary to make it adhere. The cover being then laid on a table, or clean milled board, the volume is taken in the hands, the squares at head and tail equally adjusted, and placed upon the nearest side of it, in such a position that the back of the volume, which is from the workman, will be in the middle. The far part is then brought over to the other side, and care taken not to disarrange the squares. The cover, which now projects an inch all round the volume, is drawn tightly on the back with the open hands, as also on the sides of the boards, which are rubbed with a smooth folder to efface any marks or wrinkles that may appear. The cover cannot be drawn on too tightly, as it is indispensable that it apply well to every part of the book, and that the superfluous paste be forced to the edges of the boards. The book must now be opened, the paste taken off, and the leather projecting over the fore-edge turned in, every wrinkle effaced with the folder, and the edges of the boards rubbed square. Turn the book and operate in a similar manner on the other side.

The cover at the head and tail of the book must next be turned in, by taking it by the fore-edge, and placing it upright on the table with the boards extended, and with the hands, one on each side, slightly forcing back the boards close to the headband, and

folding the cover over and into the back with the thumbs, drawing in tight so that no wrinkle or fold is seen. If the back is an open one, the loose part of the fold, previously made, must be covered over with the leather similar to the boards. Having turned in the cover the whole length of the boards, and rubbed it with the folder as on the fore-edge, the volume must be turned and operated on at the bottom in a similar manner.

The volume is now opened, and the parts of the cover brought together at the corners, pulled up almost perpendicularly with the board, nipped together, and nearly all above the point of the angle of the corner, cut off with the shears. The portion on the side is then turned down, and the other on the fore-edge wrapped a little over it, the corner being set by the aid of the thumb-nail and folder as neatly as possible. The folder should also be well rubbed in the joints to make the covers adhere in those parts where the back is liable to hold the leather off. Any derangement of the square of the boards, that may have taken place in covering, must here also be rectified.

The setting of the headband is the next operation, which is very important to the beauty of the binding, by properly forming a sort of cap over the worked headband, of the leather projecting across the back a little above a right line from the square of one board to the other. With a small smooth folder, one end a little pointed, the double fold of the leather

must be rubbed together to make it adhere, and if the boards have been cut at the corners, the hand applied thereon, and finally forcing the headband close to the leather, staying it even on the back with the finger, and forming a neat cap of the projecting part on the top of it. The folder is then applied on the edges of the boards to give them a square appearance, and make the leather adhere. Should any defect in the leather make it necessary to apply another piece on the part, it must be neatly pared, and pasted on at this stage of binding.

Should the leather project from the board at the joints the volume must now be *nipped* in the laying press, between two boards, similar to cutting boards, being thicker on one edge than the other, and so placed on the joints that the thick side solely holds the volume when pressed. When taken out, and the leather appears nearly dry, the back must be rubbed with the folder, the headband corrected if required, and the volume again placed to dry.

A few observations must not be omitted relative to morocco, velvet, silk, and coloured calf, which, from their nature, require the greatest neatness to avoid stains and alterations in the colours. Covers of the former description must not be drawn on too tight or rubbed with the folder, as the grain or pattern of the material would thereby be destroyed; and extra care must be taken with the coloured calf to prevent damage. They must be drawn on with the hands on each side at the same time; the

table should be covered with a baize cloth, and the hands perfectly clean. Silk should be prepared previously, by pasting a piece of paper thereon and be left to dry, so that, when pasted for covering, the damp will little or nothing affect its appearance. Velvet will require great care, from its peculiar texture making it necessary that it be rubbed one way only in covering. From this cause, having ascertained the direction of the *nap*, one side of the book is glued and laid upon it, and drawn smoothly on towards the back, then the back and other side is in like manner drawn over, and afterwards the edges turned in. This proceeding causes the whole to lay perfectly smooth, which velvet would not do, if drawn in a contrary way to the grain or nap.

If the book has been sewn on bands, or artificial ones have been glued on as directed, the projection prevents the leather adhering close to the back, which must be remedied while the paste remains wet. Where the bands are large, it will be necessary for them to be *tied up*, which is done by placing a board, longer than the book, on each side, projecting slightly over the fore-edge, and tying them tightly with a cord from end to end. Then with a smaller cord the leather is confined to the sides of the bands, by crossing the string :—for example, suppose the book had three bands, one towards the head, one towards the tail, and the other in the middle; the book would be taken in the left hand, the head upwards, the cord by the help of a noose passed

round close to the inside of the band nearest to the tail and drawn tight, then carried round again and brought close to the other side. The string tightened is thus crossed on the side of the volume, and the band held between it. The cord is in like manner carried on to the second and third bands, fastened, and the whole set square with the folder. It will be best understood by the following engraving.



If the corners of the boards have been cut off near the headband, a piece of sewing thread tied slightly round between the back and boards will be of advantage in causing the head and tail to set properly. When the book is perfectly dry the cords are taken off, the bands again rubbed and squared, and the department of FORWARDING completed.

For morocco, and books in other substances, having but small bands, tying up is not resorted to, being generally rubbed close in with the folder, or a box stick for the purpose. For morocco, however, where the beauty of the grain is liable to be destroyed, a *pallet* with single, double, or treble lines is sometimes used, warm, on each side of the band.

A few words may be added relative to the grain of morocco. If the natural grain is not sufficiently developed, it must be raised by rolling the leather,

doubled, on the table with the hand. The turkey grain is formed by steeping the cover in water, rubbing it from corner to corner, and then contrary way, till the grain is brought up full and square.

HALF-BINDING.

Half-binding, so called from the backs and corners only being covered with leather, and the sides with paper or parchment, presents no difference in the covering to what has been pointed out above. The leather to form the back should come down about one inch and a half on each side, and the corners neatly pared round before placing on. The sides of paper must not be pasted on till the binding is nearly finished, either before the back is gilt or after, to avoid damage. This paper is pasted, at equal distances from the back, according to the taste of the workman and the size of the volume. When dry, the end papers are pasted down, and the work finished in the same way as will be pointed out for bindings in general.

PART II.
OF FINISHING.

INTRODUCTORY REMARKS.

We have now arrived at a branch of the art, not only requiring all the careful attention before enforced, but a considerable share of taste and talent; taste to form a true estimate of what will accord well with the nature of the work and add to the beauty of the binding; and talent to execute the colours and designs in the best manner. This department may be distinguished under two general heads—Colouring and Gilding. The remarks here made will equally apply to both; but a few separate observations on colours and leather, as applied in binding in the various departments of literature, will be proper in this place, reserving those on gilding till that subject is treated of.

The kind of leather and description of colouring must ever be dependent on the nature of the work, the wish of the employer, and the price allowed for the binding. For a small number of books, a variety of patterns will perhaps be the principal object

sought, and elegance alone studied; but where a numerous collection of the treasures of literature is placed in the hands of the binder, it becomes a subject of consideration to produce the best possible effect, by presenting an appearance of different colours and leather, yet still displaying a general harmony throughout. No fixed rule can be laid down for the binder's guidance; but if he possess good taste, that cannot fail to be the best instructor. But it may not be irrelevant here to introduce the opinion of Dr. Dibdin, whose connexion with some of the first libraries in this country, and whose intimate knowledge of all the great book collectors of the same, must tend to stamp him as a good authority on the subject:—

“The general appearance of one's library is by no means a matter of mere foppery, or indifference; it is a sort of cardinal point to which the tasteful collector does well to attend. You have a right to consider books, as to their *outides*, with the eye of a *painter*; because this does not militate against the proper use of the contents.

“Be sparing of red morocco or vellum, they have each so distinct, or what painters call spotty, an appearance, that they should be introduced but circumspectly. Morocco, I frankly own, is my favourite surtout; and the varieties of them, *blue* (dark and light), *orange*, *green*, and *olive colour*, are especially deserving of your attention.

“Let *russia* claim your volumes of architecture

or other antiquities, of topography, of lexicography, and of other works of reference. Let your romances and chronicles aspire to *morocco* or *velvet*; though, upon second thoughts, *russia* is well suited to history and chronicles. And for your fifteeners, or volumes printed in the fifteenth century, whether Greek, Latin, Italian, or English, let me intreat you invariably to use *morocco*; for theology, *dark blue*, *black*, or *damson colour*; for history, *red* or *dark green*; while, in large-paper quartos, do not fail to remember the *peau de veau* (calf) of the French, with gilt upon marbled edges! My abhorrence of *hogskin* urges me to call upon you to swear eternal enmity to that engenderer of mildew and mischief. Indeed, at any rate, it is a clumsy coat of mail. For your Italian and French, especially in long suites, bespeak what is called *French calf binding*; spotted, variegated, or marbled on the sides; well covered with ornament on the back, and, when the work is worthy of it, with gilt on the edges. Let your English octavos of history, or *belles lettres*, breathe a quiet tone of chastely gilded white calf with marbled edges; while the works of our better-most poets should be occasionally clothed in a *morocco exterior*."

The further opinion of the Doctor on the style of ornament, &c., in gilding, will be given in its proper place, and which, with that cited above, may be safely acted upon by the binder, blended with such additions as his own taste may dictate.

It is in this state that the defects of forwarding will become more apparent, and which no tact or ingenuity of the finisher can effectually remedy ; for, unless the bands are square, the joints free, and the whole book geometrically just, the defect, whatever it may be, will appear throughout, and tend to destroy the beauty of every subsequent operation, from the constraint required to make the general appearance of the work effective.

The substances used for the covers of books, are, as before stated, of various kinds. Those covered with morocco, roan, russia, velvet, vellum, silk, or coloured calf, which latter has been brought to great perfection by the leather-dressers, will not require any further operation till prepared for gilding. But the cover of a book in plain calf, or sheep, would not be agreeable if left the natural tan colour ; and the taste and ingenuity of successive workmen have discovered many beautiful designs and splendid colours, which add much to the appearance of the book. Latterly, however, many of them have been little used, and particularly so since the introduction of coloured calf. Still, the binder should be conversant with the proceedings, as many of the uniform colours may be required, and the various designs which early volumes may display, cannot be executed till after the book is covered. Some of these are little understood ; and even the common marble, now only used for the plainest bindings, at one time was a profound secret, and great caution was used to keep it

so, books being sent to the inventor to be marbled at a high price. The receipts given for the superior marbles and designs, will it is presumed, present this branch of the art on a higher footing, in a general point of view, than is usually accorded to it; and it is confidently asserted, that not one of them will prove a failure, if attention to the directions be only given. Nothing has been omitted in the description of the substances best for use, the mode of preparing them, and the proceedings to be adopted, that can tend to give to the covers all the elegance and splendour of which they are susceptible. By the aid of these, assisted by some taste, the workman may vary the designs almost to infinity; but it must be admitted that unless he is devoted to his art, no mere directions or casual advantages will enable him to succeed in the more complicated or delicate operations, while with an ardour for it, all difficulties will be easily overcome.

COLOURING.

There are three sorts of ornaments upon the covers of books, independent of gilding and blind tooling; viz. marbles, sprinkles, and uniform tints: these will be described under separate heads, but previous to doing so it will be necessary to make known the methods of preparing the chemical substances and ingredients required to execute them in the best manner.

CHEMICAL PREPARATIONS.

Under this head is included *aqua regii*, or killed spirits, *nitric acid*, *marbling water*, and *glaire* prepared for marbling.

AQUA REGII.

So called from its power to dissolve gold, is a mixture of nitrous acid (aquafortis), and muriatic acid (spirits of salts), deprived of its burning qualities by block tin, which it dissolves. It is called by the chemist *acid nitromuriatic*: the muriatic also contains a portion of alkali, which gives to red a vinous tint, and for which colour it is principally used.

The two substances should be of the purest quality, of a concentration of thirty-three degrees for the nitric acid, and of twenty degrees for the muriatic. They must be mixed with the greatest precaution. Having provided a clear glass bottle, the neck rather long, capable of holding twice the quantity to be prepared, place it upon a bed of sand, the opening at top, and pour in *one part* of pure nitric acid and *three* of muriatic. Let the first vapours dispel, and then cover the orifice with a small phial, which must not confine the vapour too closely, as the bottle would be liable to burst, but which retains as much as possible without risk. Of block tin, an eighth part of the weight of the acid must then be dropped

into the bottle, in small pieces, a little at a time, covering the orifice with the phial. The acid will immediately attack the tin and dissolve it, when a second portion must be put in with the same precaution, and so on till the whole is dissolved. *Malacca* tin is the best for use, and if pure there will be no sediment, but as it cannot always be obtained, a black sediment will be left. The vapour having ceased, the acid must be poured into bottles and secured with glass stoppers to preserve it. When used, a part is taken and mixed with *one quarter* of its weight of distilled water.

It is usual with some workmen to perform this operation in a common drinking glass, but as the vapour is thereby all dispersed, the composition loses a considerable portion of its best quality; for it will be observed, if performed in a bottle as above directed, that the vapour assumes a red tint, which does not escape if the neck of the bottle be of sufficient length.

ANOTHER.

Some binders adopt the following method, but as it is not capable of producing an equal beauty and clearness of colour with the one above given, it will not be advisable to use. The former, too, will be equally effective to an indefinite period, while this will not preserve more than two or three months.

Put in a brown freestone pot two ounces of powdered *sal-ammoniac*, six ounces of fine *Malacca tin*,

in strips or drops, twelve ounces of distilled water, and last a pound of *nitric acid*, of thirty-three degrees. Leave the whole till the tin is dissolved, and then pour off and bottle as above directed.

VITRIOL WATER.

Vitriol, as sold in the pure state, will not be proper to use in marbling or sprinkling, as it would corrode and destroy the leather. It must be weakened at least in a proportion of one ounce of vitriol to three of water.

MARBLING WATER.

It is usual with many to use the water pure, but a few drops of *potash liquid* mixed with it will be found to produce better effect, the marble being rendered more distinct.

GLAIRE.

Put spirits of wine in a proportion of two drops to the whites of twelve eggs, and beat the whole well together till perfectly clear.

PREPARATION OF THE COLOURS.

The preparations used by different binders vary much, as will be seen by the receipts given for the same colours, which we judge necessary to put on record, that nothing connected with the subject should be omitted, premising that each colour may

be depended upon for producing the most satisfactory results. It may be proper also to observe that the whole of the woods and other ingredients used should be previously powdered, or reduced to small pieces, the colours being thereby much better extracted.

BLACK.

1.—Dissolve half a pound of green copperas in two quarts of water. The oxide contained in the sulphate of iron will combine with the tanning of the leather, and produce a good black.

2.—Boil in a cast-iron pot a quart of vinegar, with a quantity of rusty nails, or steel filings, till reduced one-third, taking off the scum as it rises to the top. This liquid improves by age. To keep up the quantity, boil with more vinegar.

3.—A cheaper liquid may be produced by boiling two pints of beer and two pints of water, with two pounds of old iron, and a pint of vinegar, scumming as before, and bottling for use.

BROWN.

1.—Half a pound of good Dantzic or American potash dissolved in one quart of rain water, and preserved in a bottle well corked.

2.—Salts, or oil of tartar, in the same proportions as above.

3.—A beautiful brown may be procured from the green shells of walnuts. To prepare this, a quantity of the green shells, when the nuts are gathered, must

be pounded in a mortar to extract the juice, and then put into a vessel capable of holding a sufficient quantity of water. The water being put in, the whole should be frequently stirred, and left to soak, with the vessel covered. Afterwards the liquid must be passed through a sieve, the juice well expressed, and bottled, with some common salt, for use. This liquid, after fermentation, will produce the best effects for the uniform tints, as it tends to soften the leather, and will not corrode.

BLUE.

1.—It is usual with many binders to use *Scot's Liquid Blue*, but it is necessary to know the preparation of the colour. Perhaps the best and most simple one known is one given by *Poerner*, which is as follows:—In four ounces of sulphuric acid, of sixty-six degrees, mix gradually one ounce of finely powdered indigo, so as to form a sort of pulp. Place the vessel in another containing boiling water, for some hours, and then leave it to cool. Afterwards put to it a small portion of good potash, dry and finely powdered, stirring the whole well, and letting it rest for twenty-four hours, when bottle, and use as required. This colour will appear nearly black, but may be made to any shade by adding water to it. If any portion remain after being diluted, it must be put into a separate bottle, as if mixed with the first preparation the whole would be deteriorated.

2.—A readier blue may be prepared by mixing

one ounce of powdered indigo with two ounces of oil of vitriol, and letting it stand for twenty-four hours, and then adding twelve ounces of pure water.

PURPLE.

Boil half a pint of archill or logwood with vinegar and water, of each half a pint.

LILAC.

Same as for the purple, with the addition of about two table spoonsful of potash.

VIOLET.

Half a pound of logwood chips, and one ounce of Brazil dust, boiled over a good fire in four pints of water till reduced one-half, and left to clear. Then throw in one ounce of powdered alum, and two grains of cream of tartar, and again boil till dissolved. This liquid must be used warm.

FAWN.

In two pints of water boil one ounce of tan, and a like portion of nutgall till reduced to a pint.

YELLOW.

1.—To one ounce of good caked saffron, turmeric, or French berries, add a portion of spirits of wine or aqua regii, and leave the mixture to macerate. This liquid is used cold, and may be varied to any shade by adding water when required.

2.—In two pints of water put eight ounces of French berries, and boil till reduced one-half. Then pass it through a sieve or fine cotton, and add a small quantity of powdered alum and again boil, using it warm.

ORANGE.

In a pint and a half of potash liquid, boil a quarter of a pound of fustic chips till reduced one-half; then put in an ounce of good *annatto*, well beaten, and after boiling, a small portion of alum, and use warm.

GREEN.

1.—Liquid blue and yellow mixed, will best suit for general purposes.

2.—Dissolve in a bottle one ounce of verdigris in an ounce of white wine vinegar, and place the whole before a fire for four or five days, frequently shaking the bottle.

RED.

There are three sorts of red; viz. common, fine, and scarlet.

Common. 1.—In a tinned kettle boil half a pound of Brazil wood, eight grains of nutgalls, both powdered, and three pints of water, till the whole is reduced one-third. Then add powdered alum and sal-ammoniac, of each one ounce, and when dissolved strain through a sieve. This liquid must always be used warm.

2.—Boil a quarter of a pound of Brazil dust, two

ounces of powdered cochineal, and a little alum, in two pints of the best vinegar, till a bright red is produced. Use warm.

Fine. 1.—In three pints of water boil half a pound of Brazil dust, and half an ounce of powdered nutgalls. Pass the whole through a fine cotton, and replace the liquid on the fire, adding one ounce of powdered alum, and half an ounce of sal-ammoniac. Give the whole another boil, and then add a portion of *aqua regii*, according to the shade desired, and use warm.

2.—A quicker and cheaper proceeding is by putting in a cup a portion of Brazil wood, and adding to it the *aqua regii*, letting it stand for a quarter of an hour to extract the colour.

Scarlet.—To one ounce of white nutgalls and one ounce of cochineal, both finely powdered, add two pints of boiling water. After boiling some time, add half an ounce of *aqua regii*, and use warm.

MARBLING.

Before proceeding to a description of the marbles, and other designs on the covers, coming under the general head of marbling, it will be proper to give a few directions, relative to some important matters required in the way of preparation. As the success of many of the designs depends upon the quickness with which they are executed, it will be important that the colours, sponges, brushes, &c., are previously

disposed in the best order, so as to be of the readiest access. Attention should be paid to the probable quantity that may be required of each colour, as many of them will not be available for use another time.

The books should all be previously washed with paste and water, to which has been added a little pearl-ash liquid, and left to dry. After this they must be glaired equally over, and when dry placed upon the marbling rods, the sides of the books extending over and the leaves hanging between. The rods must be placed on an elevation at the top, so as to allow the water to run gradually towards the bottom of the books; and if the backs are required to be left plain, another rod, or piece of board, grooved to the shape of the back, placed on them. To avoid the scum arising from the beating of the brushes over the colours, it is better to rub the ends of the bristles on the palm of the hand, on which a little oil has been spread. These preliminaries being settled, the operation of marbling commences, for which we shall now give directions.

COMMON MARBLE.

The book being placed on the rods, throw on the water prepared for marbling in large drops, with a coarse brush, or bunch of quills, till the drops unite. Then with a brush charged with the black liquid, and beaten on the press-pin as directed for sprinkling the edges, a number of fine streaks are

produced by throwing the colour equally over the cover. Afterwards the brown liquid must be similarly thrown over. When the veins are well struck into the leather, the water must be sponged off, and the book placed to dry.

If the volume has been previously coloured with any of the preparations before described, and it is wished to produce a marble thereon, the brown must be thrown on first, and then the black, as without this precaution the marble would not strike, because of the acid which forms part of the colours. This observation being applicable to all the other designs, it will not be necessary to again repeat it.

ANOTHER.

Throw on the vinegar black, then the brown, and lastly a fine sprinkle of vitriol water.

PURPLE MARBLE.

Colour the cover two or three times with hot purple liquid, and when dry, glaire. Then throw on water, and sprinkle with strong vitriol water, which will form red veins.

STONE MARBLE.

After throwing on the water, sprinkle boldly with the black liquid; then with a sponge charged with strong brown, drop the colour on the back in three or four places, so that it may run down each side in a broad stream, and afterwards operate with vitriol water on the parts the brown has not touched.

GREEN AGATE.

Sprinkle black in nine times its quantity of water, in large drops over the whole surface of the cover, and when the drops unite apply on the back at regular distances the green liquid, so that it may flow on the boards and unite with the black.

BLUE AGATE.

Proceed as above, only substituting blue in place of the green, weakened with water according to the shade required.

FAIR AGATE.

Commence by sprinkling black in small drops at a good distance from each other; afterwards sprinkle equally over large drops of weak potash.

AGATINE.

Proceed as for the green agate, and then sprinkle scarlet all over the cover; finally, throw on blue in small drops, weakened in four times the quantity of water.

LEVANT MARBLE.

After the water, throw on the back brown in broad streaks as directed for the *stone*, and then like manner the aqua regii. This will be found to imitate closely the Levant marble.

PORPHYRY VEIN.

Throw on large drops of black diluted in double the quantity of water. When the colour has struck well into the leather, sprinkle in the same manner brown mixed equally with water. Then apply a sprinkle of scarlet, and afterwards large spots of yellow, the liquid nearly boiling. Whilst these colours are uniting throw on weak blue, and then aqua regii, which, flowing together down the sides of the book, will form the vein distinctly.

RED PORPHYRY.

Sprinkle with black in eight times the quantity of water, very equal and in small spots. Let it dry, rub, and glaire. Then give two or three sprinkles of fine red, and one of scarlet, and again leave to dry. Finally, sprinkle scarlet in small spots, as equally as possible.

GREEN PORPHYRY.

For this design the cover must be finely sprinkled over three separate times, leaving the colour to search and dry between each. The green must be brought to the shade required by mixing with water. To form a more elegant vein, sprinkle first with weak black, and afterwards with green, and when dry with fine red.

PORPHYRY.

This marble, imitating the *eye of the partridge*, is executed by throwing on black in eight times its volume of water, in small drops, but so close as to just run into each other. When the black begins to flow, sprinkle over brown mixed equally with water. Let it dry, wash the whole with a sponge, and before quite dry again give it two or three coats of fine red. After being dry and well rubbed, sprinkle equally over the surface large drops of aqua regii.

ANOTHER.

Colour the cover with red, yellow, blue, or green, and, when dry, with black diluted as above; let this also dry, and then sprinkle over large or small drops of aqua regii. The eye of the partridge is properly formed with blue sprinkled upon the weakened black, and when dry, with the killed spirit or aqua regii.

ROCK.

Throw on large drops of black prepared as for the porphyry, and, when half dry, weakened potash in the same manner. When dry again, sprinkle on equally small spots of scarlet, and lastly aqua regii.

GRANITE.

Mix black in about fifty times its quantity of water, and sprinkle equally over very fine, repeating it as it dries five or six times. Then in like manner

sprinkle over with brown, and after rubbing well, glaire lightly. Finally sprinkle finely over with aqua regii.

TREE MARBLES.

These marbles, which were first executed in Germany, from whence they passed into England, are formed by bending the boards in the middle, so that the water and colours flow from the back and fore-edge to the centre, in the form of branches of trees. The name is also given to such as are made to imitate the grain of the wood.

WALNUT.

Formed by sprinkling black and brown only, as for the common marble.

CEDAR.

After sprinkling as for the walnut, and before perfectly dry, apply lightly a sponge presenting large holes dipped in orange upon various places on the cover, so as to form a description of clouds. Afterwards apply the fine red, with a similar sponge, nearly upon the same places, and when dry give the whole two or three coats of yellow, taking care that each penetrates evenly into the leather.

MAHOGANY.

The proceedings are nearly the same as for the walnut, the difference being merely in sprinkling

the black more boldly, and when perfectly dry giving two or three uniform coats of red.

BOX.

In order to imitate the veins contained in box, the boards must be bent in five or six different places and in divers ways. After placing the book between the rods, throw on the water in small drops, and proceed as for the walnut. After being perfectly dry, throw water again in large drops, and sprinkle on small spots of blue, diluted equally with water; and when again dry and rubbed well, apply the scarlet with a sponge as directed for the cedar. Finally, when dry, give two or three coats of orange, and the design is complete.

WAINGCOT.

Colour with strong brown, glaire, and place between the rods, with the boards flat. Throw on weak black in large spots, then brown in like manner, and lastly sprinkle boldly with vitriol water.

VARIEGATED.

Marble as for the walnut, and then put on each board a circle, oval, or other figure, and apply weak black on the outer parts. When dry, give it a good coat of red, and after throwing on spots of scarlet, take off the figures, and wash well the parts where the latter colour has been used. Finally, give the oval two coats of yellow, or other colour, with a camel's-hair brush.

MARBLING ON PAPER.

The sides of a half-bound book, which will be covered with paper, may be marbled to correspond with the effect produced on the leather by the action of the black and brown, at the same time. This is performed by pasting firm white paper on the sides, and colouring with a mixture of four ounces of nut-galls, and a small portion of powdered sal-ammoniac, boiled well together, which will take the black and brown nearly equal to leather.

SPRINKLES.

This is another ornament on the covers of books, capable of being much varied. A few of the most general use are given, premising, that any of the colours arranged as for the marbles above, or sprinkled on the uniform colours, will be productive of a beautiful effect. The books must be paste-washed over, but not glaired.

NUTMEG.

Sprinkle very finely with black and then with brown. If wished to produce a finer effect, give a sprinkle of vitriol water.

RING.

Put about a teaspoonful of vitriol to a cup of the black, and sprinkle coarsely over. If the ring is not sufficiently strong, add more vitriol.

TORTOISESHELL.

Wash the cover with yellow, and sprinkle very boldly with black. When dry, spot with a sponge, as before directed, with blue, red, and black, each colour being left to dry before the next is applied.

In concluding the description of the marbles and sprinkles, it may be remarked, that with a little taste, the workman might vary the designs to upwards of one hundred different patterns; also that each colour should be allowed to properly strike into the leather before another is used. Panes, or blank spaces, are formed by placing squares, &c. of pasteboard on the sides, which prevents the colours touching the leather when sprinkling. After the design is completed, the covers should be well rubbed with a woollen cloth, or the ball of the hand, to remove the whole of the refuse of the colour, which will be found to corrode on the surface of the leather.

UNIFORM COLOURS.

Before proceeding to execute any of the colours, the books must be well and evenly paste-washed, and left till perfectly dry. It will also be necessary to observe, that the black will become darker in all the subsequent operations of colouring, glairing, and polishing, so that attention must be paid not to use this liquid too strong.

LIGHT BROWN.

Wash the cover with vitriol water, till perfectly uniform in colour, and then with brown to the shade desired.

ANOTHER.

Mix a small quantity of annatto with the potash liquid, and use hot. This will produce, a beautiful tint.

DARK BROWN.

Colour with weak black till a slate shade is produced, and then apply the brown three or four times, as taste may dictate.

Others might be added, but the proceedings are the same, varying only the quantity of colour according to the shade. The *nut-brown liquid* will produce beautiful tints.

CORINTHIAN GRAPE.

The proceedings are the same as for the last colour, adding two or three coats of *fine red*.

COMMON GRAPE.

Proceed as for the last, omitting the brown after the black.

BLUE.

After giving four or five coats of the chemical blue diluted with water, wash lightly with weakened

aqua regii, which will take off the green reflection produced by the yellow tint of the leather.

GREEN.

Give three or four coats of the green liquid, extended in water according to the shade required. Any of the other colours noticed in the preparations may be thus executed.

OLIVE.

After giving a slate colour, apply yellow, boiled with a small portion of blue, on the cover, rubbing it equally in while hot, to insure uniformity.

PEARL GREY.

This colour must be executed carefully, so as to be perfectly uniform and without stains. Colour over with exceedingly weak black liquid, till a pale grey is produced. The weaker it is, the better will the workman succeed. Then pass over a light coat of fine red mixed in a large portion of water, so as to give a light red reflection, scarcely distinguishable.

SLATE.

Use the black liquid, a little stronger than for the last, and omit the red.

BLACK.

For common purposes, the black may be formed in the way adopted for other colours; but, in many

instances, it is necessary to produce a colour having the appearance of japan, and which will require more labour and attention.

Wash the book over with brown till a dark shade is formed ; then, with a piece of woollen cloth, apply the black liquid mixed with japan, which will produce a beautiful black. This colour should have a good coat of vellum size before glairing. Or it may be better to finish off with the varnish given in another part of the work.

Nutgalls, copperas, and gum-arabic, are used by many, and will be found to produce a good and bright colour.

GOLD MARBLES, LANDSCAPES, &c.

These designs, if properly executed, are the most beautiful that can be imagined. The labour and care, however, requisite, must ever confine them to superior bindings, for which a high price is given, to indemnify the workman for the time required to produce the proper effect. The imitation of the gold marbles is not an easy task ; but a knowledge of the art of painting, and a clever management of the brush, will enable the workman to imitate the figure of the marble so true to nature as to be scarcely distinguishable.

GOLD MARBLE.

This marble, which will not require the ability to

execute as those following it, is the invention of *M. Berth , senior*, bookbinder, of Paris, and may be executed on any kind of uniform substance. Take a piece of cloth, exceeding the size of the volume, and fold it equally; lay it thus folded evenly upon a board, and then open the other half, and cover the board; spread, upon the half towards the left, gold leaf, to the size of the cover, allowing such portion as the roll intended to be worked on it may take, which will be a saving of gold; then refold the cloth on the gold, and press the hand above, without moving the cloth, so as to divide the gold into a number of small pieces. The gold being thus prepared, moisten the side of the volume with glaire, mixed with water in equal proportion, and place it on the cloth, pressing above firmly with the hand. Care being taken not to disarrange it, turn over the volume, cloth, and board, and take the latter off, replacing it with a sheet of paper, and rubbing smartly above, so as to attach the whole of the gold to the cover. After this the cloth must be removed, and the gold will be found equally fixed; to further insure which lay on a sheet of paper, and rub well with the palm of the hand.

To remove any gold that may appear on the part intended for the roll in gilding, wet the end of the thumb, form a sort of square with the fore-finger on the edge of the board to the size of the roll, and rub the surface of the cover, which will clear it with facility before the glaire is dry.

LAPIS-LAZULI.

This marble is of clear blue, veined with gold, presenting an appearance of the utmost splendour. It is executed as follows:—

Place the volume between rods as for marbling, and with a sponge full of large holes, dipped in chemical blue, mixed in six times its volume of water, make light spots similar to clouds, at irregular distances; then put in a quarter part more blue, and make new clouds or spots a little darker. Repeat this operation six or seven times, each time adding more blue. All these coats will form stains in proper gradation, as in the natural marble; and to operate more properly, it would be better to have a model, either of the marble itself, or skilfully painted.

The veins of gold, which must not be laid on till the book is gilt, and just previous to polishing, are formed with gold in shell. The substance used to make it take and hold firmly on the cover of the book, is prepared with white of egg and spirit of wine, in equal proportion, and two parts of water, beating all well and leaving it to clear; then wet a small portion of gold powder with the liquid, mixing it with the finger, and use it with a small camel's-hair pencil. Pass it on in different places, so as to imitate the model, according to the taste of the workman; when done, let it perfectly dry, and polish with the polisher scarcely warm.

It will be perceived, that by the use of other colours, or two or three together, many beautiful designs may be in like manner executed.

LANDSCAPES.

Many beautiful subjects may be formed on the sides of books, by the workman skilled in painting. The volume is prepared by being pastewashed, so as to present an uniform fawn colour, the designs slightly traced, and afterwards coloured according to the pattern, the colours being mixed to the proper shade with water. The shades must be tried on pieces of refuse leather, as, being spirit-colours, when once laid on, no art can soften them down if too strong, and a peculiar lightness of touch will be necessary to produce effect. Portraits, &c. may also be executed in this manner, and many superb designs have at times been executed by the best binders of this country and France. M. Didot, bookseller of Paris, presented a copy of the "*Henriade*," published by himself, to Louis XVIII., most elegantly ornamented in this style. It was executed by *M. Lunier Bellier*, bookbinder of Tours, and exhibited on one side a miniature portrait of Henry IV., and on the other a similar one of Louis XVIII., both perfect likenesses. The greatest difficulty consisted in the portraits, which were first imprinted on paper, very moist, and immediately applied to the cover, on which they were impressed with a flat roller. When perfectly dry, they were coloured with all

the art of which the binder was capable, and the other ornamental paintings executed by hand. This proceeding requires great care in the execution, and will be applicable to any design where the binding will justify the expense.

TRANSFERRED LANDSCAPES.

The art of transferring, long practised in the ornamenting of fancy articles, was judged equally practicable for forming a superior embellishment for the sides of books. But the varnish necessary to be employed in the operation, rendered the invention of no utility, from the action of the heated polisher turning it white or causing it to shell off. After several trials, this difficulty is believed to be overcome, by the employment of a very simple and common article in the office of the bookbinder, viz. *new glaire*, well beaten up. The proceeding is as follows:—Cut the print, intended to be transferred, close to the design on all sides. Let it steep in the glaire till it is well saturated with it. During this time glaire the book twice, letting it dry on each application. Take out the print, place it exactly in the centre of the side cover, and, laying a piece of paper above, rub it sharply on the book so that it may adhere very closely. Remove the upper paper, and with the finger rub off the paper gently until the printed design begins to appear, wetting the finger in *glaire* should the paper get too dry. The utmost attention will now be necessary, for the least care-

lessness in removing the paper that still remains may entirely destroy the design, and the whole of the previous labour be lost. The paper must be gently removed, piece by piece, till the design only appears on the leather while damp. When dry a white appearance will be presented, arising from the small particles of paper adhering to the ink, but these will be sufficiently hid on glairing the side previous to finishing. The extent and variety to which, at a small expense, these designs may be carried, with the finish and beauty given to the sides of books, renders the subject worthy of the attention of the ornamental workman particularly ; but he must possess perseverance and carefulness in an eminent degree, to carry it to perfection. After the gilding or other ornament is executed, the side must be finished off in the usual manner. A slight coat of varnish described in a subsequent part of the work, will, in this case, give a superior finish.

ETRUSCAN.

This style is, where, instead of covering with gold, the book is ornamented with gothic or arabesque compartments, or imitations of Greek borders and Etruscan vases, in their proper colours ; which, when well executed, have a good effect. The Marquis of Bath possesses a copy of "*Caxton's Recuyell of the Histories of Troye,*" bound in this coloured manner by *Whittaker*, of London, who some years ago brought the style to considerable perfection. The

back represents a tower, in imitation of stone, on the battlements of which is a flag bearing the title, and on a projection of the tower the name of the printer is impressed. On the sides are Trojan and Grecian armour, in relief, round which is a raised impression of the reeded axe. The insides, which are also of russia, are ornamented with drawings, in India-ink, of Andromache imploring Hector not to go out to fight, and the death of Hector. The edges of the leaves are gilt, on which various Grecian devices are painted.

To execute this style properly, the design must be well marked out, and the colours prepared to the proper shade by trials on refuse pieces of the same material as that on which it is wished to operate.

ORNAMENTAL BLACK LINES.

Black lines, in rays, or intersecting each other in the form of diamonds or other devices, on the sides of books, which present a good appearance if well-executed, are ruled with steel or swan pens, the nibs being formed to the size required by the boldness of the lines. The vinegar-black, mixed with a portion of gum-arabic, to neutralize a part of the action of the acid and make it of stronger consistency, will be found to answer best. Whatever the pattern, it should be slightly traced with the folder, and the design be afterwards marked with the pen, kept steady by the aid of a ruler.

BLACKING THE SQUARES.

Unless coloured uniformly, the whole of the designs before described will not produce the best effect if the squares remain plain or variously tinted; it is therefore necessary to black the edges and squares of the board, and the cap over the headband. This is done with a piece of any firm soft substance on the edges, and with a sponge within the volume, sufficiently below the part where the end papers will cover. Finally, the covers should be well paste-washed and left to dry.

BANDS AND TITLE-PIECES.

Where the backs are plain, it will be necessary to mark the place intended for the bands in gilding. For this purpose the binder should have patterns of the various forms and sizes cut out of thin board, a little longer and double the breadth of the volumes, so that they may be held firmly on the sides, while the bands are marked across the back through the apertures cut in the pattern. It is usual to give a double band at the bottom of the back, and therefore this must be allowed for in the pattern, which lengthened portion must be placed even with the edge of the boards at the tail of the volume, and the bands marked with the folder. By this plan the whole of the bands in sets of books will present a

parallel line, and the bad effect produced by the inequalities arising from compassing the distances and trusting to the sight will be avoided. A great saving of time is also effected, as the patterns once made will serve for a very considerable period.

On the fancy colours and sprinkles it is usual to attach lettering-pieces of morocco. For this purpose the morocco, or roan if common work, is cut lengthways of the grain, according to the space between the bands, and the slip placed across the back to measure the breadth, and then cut off. Then slightly damping on the flesh side, it must be pared as thin and equal as possible, and the edges sloped evenly down so as to bring it to the exact size of the square it is to occupy. Should the back require two pieces, viz. another for the volume or contents, it may be proper to vary the colour. These title-pieces are pasted evenly on, a portion of paste rubbed over them with the finger, and then attached firmly and equally by rubbing down the edges with the folder, when the paste must be well washed off with a clean sponge. Where economy is an object, the squares intended for the title may be darkened with brown or black, which will show the lettering very well.

INLAID ORNAMENTS.

To give some bindings in vellum, calf, or morocco an additional degree of splendour, it is sometimes required to execute ornaments on the covers of a

different colour, and as this is an important manipulation it will be necessary to give an example. Suppose we wish to make on the side a rosette on which a gilding tool of the following pattern, but of larger dimensions, is to be impressed in gold.



Imprint the tool upon purple morocco, taking care that it marks the figure well, then cut it round on the exterior edge, and pare it evenly and very thin. Cut out and pare the interior circle of the rosette in yellow, and the exterior circle in red morocco, in the same manner. Then paste on the purple in the centre of the board, and when dry again impress the tool, to mark the places for the other pieces, which paste on evenly. The book will then be ready for gilding, and when covered with the gold ornament, the joints of the leather will not be perceptible, if well executed. Each of the four sections of the circle may be formed of different colours, if variety is desired. The proceeding will be the same for forming bands on the back, or corners on the side, of other colours, paying attention to the forms and figures of the gilding-tools. This kind of ornament is more frequently executed on white vellum than any other substance.

BURNISHING.

Previous to gilding the covers, it is usual to burnish the edges, and paste down the end papers, though sometimes these operations are not performed till after. The edges are burnished by placing the volume open, with the fore-edge between boards, similar to backing boards, in the laying press, and screwing it tightly therein; then with the burnisher rubbing the edge firmly and smartly over till it presents an uniformly bright surface, and free from any dents or inequalities. When the fore-edge is finished, the volume is taken out of the press, and the head and tail burnished in a similar manner, the ends of the boards resting in the groove by the joints, the covered boards of the volume being open. Common calf, sheep, and half-binding, may be burnished with the boards closed, six or eight together, but it will be necessary to delay pasting the sides on the latter till after the operation, to avoid the liability of tearing.

PASTING THE END PAPERS, JOINTS, &c.

The volume being laid upon the table or press, with the head towards the workman and the upper board open, the guard or false end paper must be removed and all other substances cleared out of the joint with the folder. The end paper must then be

pasted over, and the cover brought down upon it, pressed firmly, and again opened. It will attach itself to the board, when it must be pulled down sufficiently to form the square and fold in the joint. The position being adjusted, a piece of white paper should be laid thereon, and the whole rubbed perfectly even with the flat of the hand. Then with the folder the paper is slightly pressed into the crease formed by the board and back, and rubbed perfectly square on the joint. The volume with the board open may then be turned, and the other side done in the same way.

If it is intended to execute a gilt border or blind tooling in the interior of the cover, it will be important that no part of the end paper covers it. To avoid this a slip must be cut off at the head, tail, and on the fore-edge, proportionate to the extra breadth of the border over the square. Or, if morocco joints have been placed in the volume, the two corners of the portion left to be attached to the boards must be cut, to prevent their showing above the end paper, which is to be pasted over and would disfigure the edge, taking care to leave as much leather as will cover perfectly such portion as is intended for the joint and square of the board, so that, when the paper is pasted on, it will not be perceived that the corners have been cut off. Pare the edge of the leather where the part is cut off, on a small board or folder placed underneath; afterwards paste the joint on the edge of the board, attach it neatly with

the thumb, finger, and folder, and when dry paste thereon the marbled or coloured paper, cut to the proper size.

For ordinary volumes common flour paste will do, but for silk, satin paper, and other delicate substances, it may be necessary to use a finer article which dries more quickly. In this case, use the finest gum-arabic, dissolved in warm water; but very white starch, mixed strong, and without lumps, will be found preferable, as it soon dries and is not so liable to stain as the gum.

If the ends are of silk, it will be necessary to paste thereon a piece of white paper previous to placing on the volume, to avoid the stains which the acid entering into the composition of the leather is liable to make on the silk. This is also necessary in order to its being cut without its presenting a jagged edge. When compassed and cut to the size of the square left within the ornamental border, usual in such bindings, it is pasted on the paper side and placed evenly on the board, rubbed firmly down, and left to dry. In all cases, however, where the border is gilt or otherways ornamented, below the level of the edges of the volume, the ends must not be pasted down till after that operation is completed, as the glaire and oil would be liable to stain, and present a bad effect. Where the end papers are left plain, the last two leaves being merely pasted together, the ends will only require pasting, and attaching by placing the volume between boards, and screwing

firmly in the standing press, immediately after which it must be taken out and the boards opened, so as to make the joints free.

GILDING.

Before proceeding to a description of the various manipulations required in gilding a book, it will be necessary to direct the attention of the young workman again to what has been advanced relative to care and attention in previous parts of this work, and follow up the remarks there made, with others on the taste necessary to be displayed in this most important part of the Art of Bookbinding. When it is considered that the most celebrated artists have arrived at the eminence awarded to them, not only through the elasticity, solidity, and squareness of their bindings, but also from the judicious choice of their ornaments for gilding, and the precision and beauty with which they have been executed, it cannot be too strongly impressed on the workman that this should ever occupy his first attention. Nothing is so disagreeable to the eye as injudicious or badly executed ornaments, while with chaste and classical embellishments, tastefully applied, an appearance of richness is produced on the volumes that cannot fail to give satisfaction to the most fastidious critic. The sides of the volumes present the field most favourable for the display of ornamental taste, admitting, from their extent, the

execution of the most complicated designs. This elaborate style of ornament has been carried to such perfection and splendour as, in many instances, to have occupied several days in the execution of one side alone, but it is only by the most vigorous application, greatest care, and correct taste, that proficiency therein can be attained; with these, success will soon crown the endeavours of the workman, and he will have the satisfaction of finding himself able to imitate any pattern, however difficult, as well as execute many new designs and compartments, of which, till he applied himself, he had not previously an idea.

As regards the style of ornament, it must be left to taste, but, as before promised, it will now be proper to introduce the remarks of Dr. Dibdin on the general effect of Gilding and Blind Tooling, leaving the detail to be suggested to the mind of the Gilder.

“First, let your books be well and evenly lettered, and let a tolerable portion of ornament be seen upon the backs of them. I love what is called an *overcharged back*. At first the appearance may be flaunting and garish; but time, which mellows down book ornaments as well as human countenances, will quickly obviate this inconvenience; and about a twelvemonth, or six months added to the said twelvemonth, will work miracles upon the appearance of your book. Do not be meagre of your ornaments on the back, and never suffer *blind*

tooling wholly to pervade a folio or quarto, for by so doing you convert what should look like a *book* into a piece of mahogany furniture.

“ In large libraries there should not be too much blind tooling, or too great a want of gilt. No doubt the ornament should be as appropriate as possible to the book. One could not endure gingerbread gilt *Bibles* and *Prayer Books*, or *Chronicles* or *Dictionaries*, or other books of reference. Let these have a subdued decoration on their backs; bands only full gilt, or a running edge tool in the centres of them, with small ornaments between the bands.

“ I would recommend the lettering of a volume to be as *full* as possible, yet sententiousness must sometimes be adopted. The lines should be straight, and the letters of one and the same form or character within the line; yet the name of the author may be executed a size larger than that of the date or place of its execution, and the lettering may be between the top and bottom bands, or it may occupy the space between the three bands, or even more. Re-letter old books perpendicularly, as was the custom. In all fresh bindings, however, prefer horizontal to perpendicular lettering.”

It remains to urge only that particular attention be paid to the lettering of books being their right titles, as the contrary will present to the judicious an effect the most disagreeable, and may be the cause of producing dissatisfaction with the whole of the binding in the mind of the owner; and also to avoid

the contrast which the different shade or colour of new lettering pieces will give to some bindings.

PREPARATIONS FOR GILDING.

To operate successfully it will be necessary that the workman provide himself with good size, glaire, and oil. The first is prepared by boiling fine vellum slips till a good size is produced, of a consistency that will lay equally on the volume without blotches or ropes, and must be used hot. The glaire is formed of the whites of eggs, beaten well with a *frother* till it is perfectly clear, and the froth taken off. Some binders put a little spirits of wine in the glaire, in the proportion of one drop to six eggs. This liquid will improve by keeping, and should never be used new if it can possibly be avoided. For morocco bindings the glaire is sometimes diluted with water. The oil adopted by various binders is different, but palm oil, in its imported state, will be found the best for calf —sweet oil for morocco and russia. Hog's lard is also considered good. For very light coloured calf fine mould candle is preferable.

Vellum size is now very seldom used in gilding. The best preparation for coloured calf is paste mixed with urine. On books thus prepared the glaire must be applied twice, taking care that each coat is quite dry before the next is added, and that it lays perfectly even on the whole surface, free from globules or any substance whatever. Morocco and roan will not require more than one coat, and where practicable

only on such parts as are to be gilt. The state of the weather must ever determine the number of volumes to be proceeded with at one time, as in the winter double the number may be glazed to what the dryness of a summer's day will admit of, so as to work with safety and produce effect. A good paste-wash before glazing is always advisable, as it prevents the glaze from sinking into the leather. The volumes being thus prepared,

GILDING THE BACK

is commenced, by oiling slightly, with a small piece of cotton, the whole length and the caps of the headbands. If the book is merely intended to be *filleted*, for the economy of the gold, small strips are cut on the gold cushion, attached to the heated fillet by rolling it slightly over, and affixed to the volume by passing it firmly on the lines previously marked. But if the back is to be fully ornamented, it will be necessary to cover it entirely with gold.

The tools, &c., necessary for the gilder will be described in another section. These should be disposed on the table before him, so as to be selected with the greatest facility, and in readiness for every purpose for which they may be required.

To lay on the gold, the workman takes a book of the metal, opens the outside leaf, and passes the knife underneath the gold; with this he raises it, carries it steadily on to the cushion, and spreads it perfectly even by a light breath on the middle of the

leaf, taking care also that not the least current of air has access to the room he may be operating in. Afterwards the gold must be cut with the gold knife to the breadth and length of the places to be covered, by laying the edge upon it, and moving the knife slightly backwards and forwards. Then rub upon the back the oil, and apply the gold upon the places to be ornamented with a cotton or tip, rubbed on the forehead or hair to give it a slight humidity, and cause the gold to adhere. But if the whole of the back is to be gilt, it will be more economical to entirely cover it, by cutting the gold in slips the breadth of the book, and applying the back on it; afterwards press it close with the cotton, with which any breaks in the gold must also be covered, by placing small slips where required. The humidity of the hair or forehead will be sufficient to make the gold adhere to the cotton or other instrument with which it may be conveyed to the book. The fillet or roll must then be heated to a degree proper for the substance on which it is to be worked. Calf will require them hotter than morocco and roan, and these warmer than russia and vellum. To ascertain their proper heat, they are applied on a damp sponge, or rubbed with the finger wetted, and by the degree of boiling that the water makes their fitness is known; but a little exercise and habit will render this easy of judging. To further insure this, the roll or pallet is passed over the cap of the headband: if too hot, the gold will be dull; if too

cool, the impression will be bad, from the gold not adhering in every part.

When the headbands are gilt, and the gold is found properly fixed, the volume is placed against a piece of wood in the form of a T, screwed tightly in the laying press, the top about an inch below the level of the back of the book when placed, with the fore-edge resting on the press, against it. The pallet or roll intended to form the bands, must then be worked gradually across the back, describing the arc of a circle, guided by the places previously marked for the bands, and forming a double one at the tail, for which the larger space was allowed. Care must be taken that every one present a parallel line to each other, so as to avoid the disagreeable effect produced from an inclination to either side. It will also be necessary to rub each tool on a piece of rough calf before using, that the gold may present a bright appearance in every part.

The book must now be placed evenly in the laying press, and the ornamental tools worked off. In placing these, great attention should be paid to their occupying the exact centre of the squares between the bands. If the ornament is not large enough to fill the whole square so as to present an agreeable effect, one of the smaller tools, corresponding in detail, must be chosen to fill up the corners or other spaces left. This will be fully descanted on under the head of Combination of Tools. Should it be desired to present on the back simply an ornamental

lettering piece at the head, diverging to a point towards the middle of the book, and the rest of the volume left plain, it will be necessary to impress the tool previous to glairing, and then apply the glaire with a camel's-hair pencil in the indentations the tool has formed. When dry, cover with gold, and re-impress the tool in the marks previously made, and letter the title. This proceeding is adopted in every pattern where part of the back is intended to be left dull, by being free from glaire.

The judicious choice of ornaments for the back is of the utmost importance. For instance, such as represent animals, insects, or flowers, which are only proper for works of natural history, entomology, and botany, should never appear on the backs of works on general literature, as it would be an evidence of bad taste or carelessness. These kind of tools are never adopted at the present time, unless in binding a volume to pattern.

The title must next engage attention, and the letters placed thereon, either singly or together, with brass type properly fixed in the hand chase. If with single letters, the tail of the volume must be lowered about an inch, and the workman, unless very experienced, will do well to draw a thread of silk across the gold to direct the heads of the letters. Taking each singly, he places them on the back with the right hand, steadying the letter with the forefinger of the left. If the title is set in the chase, and the volume not thick, it may be

lettered in a similar manner to that described for the pallets or rolls, by placing it against the board, and lettering it across gradually; but if thick, it will be better to place the volume evenly in the press, and apply the title, guided by the thumb, firmly across. The title in either case must be justified to produce the best effect, taking care to avoid, if possible, having two lines of the same length; and where the title can be measured as in the type it may, the exact centre should be ascertained before applying it heated on the gold. The back may now be considered finished; the gold which has not been impressed by the gilding tools must be well rubbed off with the *gold rag*, and minutely cleared off with a piece of fine flannel so as to display the delicate lines of the ornaments as perfectly and clearly as possible. Attention should be paid to this particular, for let a book be finished in the most tasteful manner possible, unless well cleared off, the effect is entirely lost. It must now be polished, and the squares and edges of the boards proceeded with.

GILDING THE SQUARES, &c.

For gilding the edges of the boards the gold may be taken, as for the bands, on the roll, and the volume held firmly with the left hand, but if large put into the press between boards, so as not to injure the back. Where the ornament of the square is simple, the like proceeding of applying the gold will be proper, resting the board upon an elevation equal

to the thickness of the book. But if the square has been left large, with a leather joint, so as to admit of being more elaborately filled up, the gold must be laid on the whole space with the tip and pressed close with the cotton. The gilding is then proceeded with in the same manner, as will be fully detailed in the directions for the side ornaments.

GILDING THE SIDES.

The sides, from affording more ample space, are the part of the volume whereon the workman can, and is expected to, show his taste and skill in gilding. The proceedings are the same as before pointed out where a simple roll is the only ornament round, but where the pattern is extensive, and the details minute, it is necessary to have the whole worked dead upon the volume before glairing, and then apply the gold. If one side is done at a time, the book is taken by the leaves with the left hand, the board intended to be covered resting on the thumb, and the gold laid on as for the squares, either over the whole side, or on such parts as the pattern indicates. The gold may be laid on both boards by placing the leaves of the volume between two billets of wood, with the two boards resting flat upon their surface, as here sketched:—



This affords greater facility for placing uniformly

and systematically the fillets, rolls, and tools necessary to complete the design on each side. Where the pattern has not been marked, and one side only proceeded with, the roll is run in a straight line, which should be made previous to covering with gold, on the board by the joint on the back, the volume turned for the head and tail, and laid open upon the board for the fore-edge to give it the firmness necessary. Directions for forming the most elaborate designs will be given under the head of Combination of Tools, whereby it will be perceived that it requires but taste, and a just observation of similarity of design, and the geometrical proportions of the ornaments, to execute them to any extent. One variation from this rule will destroy the effect of the whole pattern : it will therefore be to the benefit of such as are not conversant fully with the art, to assist themselves with designs drawn on cartridge paper, which may be marked through on the leather, and the pattern executed in gold or blind as required. In all, the gilding will be the same, either to glaire over the whole cover after the design is stamped, or if the plain part is to be left dull, by glairing the marks only with a camel's-hair pencil.

If more extensive gilding is required, such as escutcheons, armouries, or large plates of flowers, vases, &c., for the centre of the volumes, or extensive corner-pieces, it will require the greatest attention to insure the proper execution of all the ornaments, so that every portion appear perfect. These pieces are

too large to be affixed by hand, and it is therefore necessary to have recourse to the press. The difficulty, however, experienced in performing this part of gilding properly in the common press, has led to the invention of the arming-press described in the section on tools, &c. But as this invention may not be found available in some offices, where the business is not extensive, the proceedings to be adopted with the common press are here given. Having glaired the parts and laid on the gold as before directed, the volume must be opened and the board placed on a thick billet of wood, fixed in the press, the rest of the volume hanging in front; the engraved plate heated to a degree that it is held in the hand with pain, (if the cover is calf, if morocco, cooler,) is then placed on the board, paying every attention to its being fixed perfectly straight, and in the exact spot intended. The press must then be pulled strongly and evenly down, and the impression will be given immediately.

As nothing appears so ridiculous and disagreeable as a centre plate diverging from a right line to either side, every precaution should be taken to prevent the possibility of its doing so. To effect this the distances from each side of the border should be exactly marked with the compasses, and lines slightly drawn by the use of the square. The most simple plan, and one that insures a certainty as to the centre of the book, is to cut a piece of paper to the size of the side, and fold it even in the length and breadth.

The intersection of the lines being the exact centre, the arms or other ornament must be placed correctly on the paper, and an impression taken by means of the press. If correct, place the paper on the side of the book, put the block in the blind impression, and pull it through on the book. One coat of glaire pencilled in will be here sufficient for gilding. If the book has been cut true, the corner pieces cannot fail to be right if proper attention is paid. The proceedings to be adopted with the arming-press are the same as to the disposal of the book, but it will be advisable for the workman to study the description given, as also to turn to the directions for Blind Tooling, &c., where the subject will be further discussed.

Since the former editions of this work were printed, a method has been adopted for gilding the sides of books by means of what are called BLOCKS. These are cut on thin brass, glued to plates, and form a variety of patterns. They will be found described more fully further on.

It remains, however, here to speak of the gilt embellishments called embossed or arabesque bindings. These are executed with designs cut in plates of brass the size of the sides of the book ; they were at first only used plain, but have latterly been adopted in gilding. Being cut to fit the board of the volume, the difficulty of placing the plate in a common press is not very great, but when performed with the arming-press a precision is obtained that no other

means can insure. This arises from the plate being affixed to the platten of the press, and descending sharply on the book, which is placed properly on the bed through the means of squares attached thereon. The gold must be fixed as before indicated, and after the impression is taken, rubbed well off so as to display the beauty of the design. Of this style are the bound books for presents, photographic albums, &c., with bevelled edges, sunk patterns, and elegant gilding, or blind ornament, now so common. The illuminated bindings properly come under this head, but from their importance they will be treated of in a separate section, premising that, the further directions there given may be useful in this place. The work, when required, will now be ready for polishing.

GILDING ON SILK AND VELVET.

The proceedings necessary to be adopted for gilding on silk and velvet, are, from the delicate nature of these substances, different from those laid down for gilding on leather. The glaire used on the latter would tend to stain, and therefore it is necessary to employ other means for fixing the gold. This is by drying the whites of eggs and reducing them to a powder, which is put into a small bottle and tightly tied over with a piece of fine muslin, by which means it is equally distributed on the space intended to be gilt. Gum Sandarac is now, however, more generally used for this purpose. The powder being

applied, the gold is cut in slips and taken on a roll, of a circumference equal to the length of the space intended for it to be applied on. The design is then firmly impressed, and the superfluous gold brushed off with a soft brush or clean piece of cotton, and the other side alike executed. In lettering, or fixing single tools on the back, the same proceedings must be adopted, by taking the gold thereon and applying it to the back or side of the volume. Where the design is large, or elaborate work is required, it will be better executed in the following manner. The design must be drawn on paper, and worked through on the silk, after which the impression must be carefully glazed with a camel's-hair pencil; when dry, rub the parts intended for the gold with the finger passed through the hair, or with a clean rag slightly oiled, and after laying on the gold as directed for other styles, reimpress the tools, and *whip* off the superfluous gold with a clean flannel.

As there is no moisture in silk, the workman must not lay on at one time so much as he does on calf and other substances.

ILLUMINATED BINDING.

This style, an invention of our neighbours, the French, and for some time kept by them with the greatest secrecy, was, after much expense, introduced into this country by Mr. Evans, bookbinder, of Berwick Street, Soho, London. It is a binding of

the utmost magnificence, uniting the varied beauties of the arabesque and gilt ornament, blended with the illuminated decorations seen on early MSS. before the invention of printing. When executed in the best manner, nothing can exceed the beauty of the whole *coup d'œil*, rivalling, as it does, in splendour, the most elaborately finished design of the painter. The time required to be devoted, on its first introduction, to a single specimen, appeared likely to confine this sort of ornament to the finest treasures of literature, and even to them in a limited degree. The improvements, however, in machinery and the rapid advance of the arts has, in a few years, brought this style into very general use for albums and other works where embellished covers are adopted, and even on the cheap roan bindings used for Bibles, Prayers, &c. it may be seen, though in effecting this cheapness it must be premised that a less durable method is adopted.

To execute the more elaborate designs, practice, and a taste for the arts, will here alone serve the workman; without these requisites it would be futile to make the attempt. But as the proceedings require to be executed with the utmost care, we shall enter fully into such as are new, and, from their importance, at the risk of being considered prolix, again touch on those that may have been before treated of.

The description of one side will serve the purpose of making the proceedings fully understood. Whether the material be of morocco or white vellum, it must

be washed, if required, perfectly clean, and left to dry. The first operation will be to place the side on the bed of the arming press, and boldly impress the design thereon. The most elegant and capable of the greatest display of colour, are subjects of botany and natural history. The next step will be to glaire with a camel's-hair pencil such parts of the impression as it is intended shall be afterwards covered with gold. This done, the delicate operation of colouring may be proceeded with. In London and Paris this is executed by professed artists in no way conversant with bookbinding. The colours to be used must be such as do not at all, or very slightly fade, on exposure to the air or sun, such as carmine, ultramarine, indigo, burnt sienna, gamboge, and sap green. These must be prepared, with fine gum, in the same manner as for painting, and be as lightly and delicately laid on such parts of the design as it is intended the colour should occupy, taking care that the ground colour or leather is entirely hid. Let every thing be true to nature, each bird, plant, and flower its proper colour, and a general harmony prevail throughout. When finished, let the whole perfectly dry, and then, in the manner directed, lay gold on such parts as it is intended, in the re-impression of the plate, should be further embellished. Heat the plate, place the side again under it, and give it a firm and sharp impression. Rub off the superfluous gold, and the whole of the delicate lines of the ornament will be found beautifully gilt, the

colours firmly fixed by the heat of the plate, and the rough edges of the colour completely effaced by the re-impression of the original design.

In executing the less expensive and more simple designs, the plate is impressed in gold on the side, and the parts left ungilt on the leather afterwards coloured according to the taste of the workman.

ANTIQUE OAK AND OTHER BINDINGS.

Great varieties of style in the covers of bindings have been introduced within the last few years, but these must be left to the imitative powers of the skilful workman, as no written description would give the requisite information and guidance. Should he be desirous of executing these, he will do well to study some good specimen. Among others may be mentioned the Antique Oak Bindings, adopted by Mr. Murray, for his "Illuminated Prayer Book," and Messrs. Longman and Co., for "Gray's Elegy." Also the Iron Binding, viz. covers in imitation of cast iron, in which Messrs. Longman and Co. have had bound the "Parables of our Lord." Bibles and Prayers are now frequently bound to imitate the antique, having heavy boards, with clasps and corners.* Books for presents, albums, &c., have also been bound after specimens of early bindings in wooden boards, the edges being bevilled off, and afterwards covered.

* See Clasps, Corners, &c., in Part III.—Stationery Binding.

BLIND TOOLING.

This is an ornamental operation applied after the book has been gilt and polished, and if judiciously intermingled with the gold, will not fail to present a good effect. It is a style that has been much used of late years, and is executed in the same way and with the same tools as for gilding, but without any gold applied on the places thus ornamented. The rolls, pallets, and smaller tools are applied by the hand, and the large plates with the press, with the same precautions as indicated in the previous section. If the pattern consists of straight lines, and the workman possesses a good eye, the best manner of executing it is by making use of a pallet, placing it firmly on the book, and sliding it to the opposite point. It remains, therefore, to consider such matters as more immediately apply to this style of decoration.

The tools for blind tooling should not be so warm as for gilding, and particularly for morocco. If it is wished to be left dull, that is, free from glaire, the particles attaching themselves over the edge of the gold ornaments must be removed with the end of the finger, wrapped over with a piece of fine cloth, and wetted. This will soon wash it clean, and when dry the blind ornaments may be proceeded with.

Sometimes black fillets are applied upon morocco,

or more frequently on rough calf. For this the tools are charged with black from the smoke of a candle, and affixed to the leather in the usual way. If a bolder impression only is required, a greater heat given to the tools will be sufficient.

Graining may be properly considered as a blind ornament. This is where, by the means of wooden or metal plates, the sides of a book are marked with lines crossed over each other, so as to form innumerable small squares in imitation of russia; or in imitation of the grain of morocco, scales of fish, and other substances. The operation is performed by placing the volume between the two plates even by the groove of the back, in the standing press, and pressing it tightly down, and so even that the plate will be impressed equally over the whole surface. Nothing will look worse than a bold impression in one place and a slight one in another, and therefore it becomes of importance to see that it is evenly pressed, as a second application of some kind of plates will never be found affixed to the same places.

ARABESQUE.

Arabesque ornaments have nearly superseded the whole of the plates above spoken of, and we seldom see any other than the cross or russia grain now applied. The arabesque, a description of binding common in earlier times, was revived in France, and introduced into this country in the year 1829, by

Messrs. Remnant and Edmonds, bookbinders, of Lovell's Court, as referred to at page 156. It was first only adopted in the binding of Bibles and Prayers, but soon carried to great extent in many other bindings, particularly of albums and books of illustration. The designs are imprinted on the leather by means of a powerful arming press, generally previous to its being placed on the book, and at a rate of economy, considering the richness of the ornaments and perfection of execution, almost incredible. The covers in morocco, roan, or other leather thus executed, may be purchased at a price much below that for which they could be produced on a limited scale; it will therefore be to the advantage of the binder, if desirous of executing binding in this style, to possess himself of such as he may require. The book to be covered must always be cut to the exact size of the design on the leather, carefully covered with glue so as not to destroy the beauty of any part, and the lettering or other gilding proceeded with as before directed. The gilt arabesque will be the same as before laid down under the section devoted to "Illuminated Bindings," omitting the colours. Any pressing the book may require after covering must be done between boards covered with five or six thicknesses of good flannel. It is not, however, usual to place the better sort of bindings of this description under the action of the press after covering.

The workman has now had presented to him the

different styles of external book decoration, with the proper directions for their execution. By attention he may soon be able to produce binding of a superior character, and in time take rank as a first-rate artist. For his guidance, and as an illustration of what has been done by others, we give a description of the binding of a book, in the library of J. W. King Eyton, Esq., executed by Hayday, one of the most talented artists of the present day. “The work is a large paper copy of the late Mr. Blakeway’s ‘Sheriffs of Shropshire,’ in imperial folio, with the armorial bearings beautifully coloured. The binding is of blood-coloured morocco, extending an inch and a half all round the inside of the cover, on which is placed a bold but open border tooled in gold, forming a fine relief to the rest of the inside, which is in purple, elegantly worked all over in hexagons running into each other in the Venetian style. In each compartment is placed the lion rampant and fleur-de-lis alternately. The fly leaves are of vellum, ornamented with two narrow gold lines, and the edges are tooled. The back consists of hexagons, inlaid with purple, containing the lion and fleur-de-lis aforesaid, but somewhat smaller than those in the interior. The design on the outside is a triumphal arch, occupying the entire side, highly enriched with its cornices, mouldings, &c., executed in suitable small ornamental work; from its columns (which are wreathed with laurel), and other parts of the structure, are suspended the shields of the Sheriffs, seventy in number,

the quarterings of which, with their frets, bends, &c. are curiously inlaid in different colours of morocco, and, with the ornamental parts of the bearings, have been blazoned with heraldic accuracy on both sides of the volume. When we state that more than 57,000 impressions of tools have been required to produce this wonderful exemplar of ingenuity and skill, some idea may be formed of the time and labour necessary for its execution. Of the cost we may not speak; but we may reasonably feel proud of the triumphs of taste and talent thus manifested by our countrymen."

COMBINATION OF TOOLS.

The decorative or finishing department of every branch of art, is one of the utmost importance to the general effect of the complete work, and to the giving a just and proper termination to all previous operations. In the Art of Bookbinding this will more particularly apply, for unless the gilding and finishing portions of the work are conceived with a good taste, and executed in a spirited and workman-like manner, the expense and trouble of many of the earlier proceedings are entirely lost, or rendered of little effect.

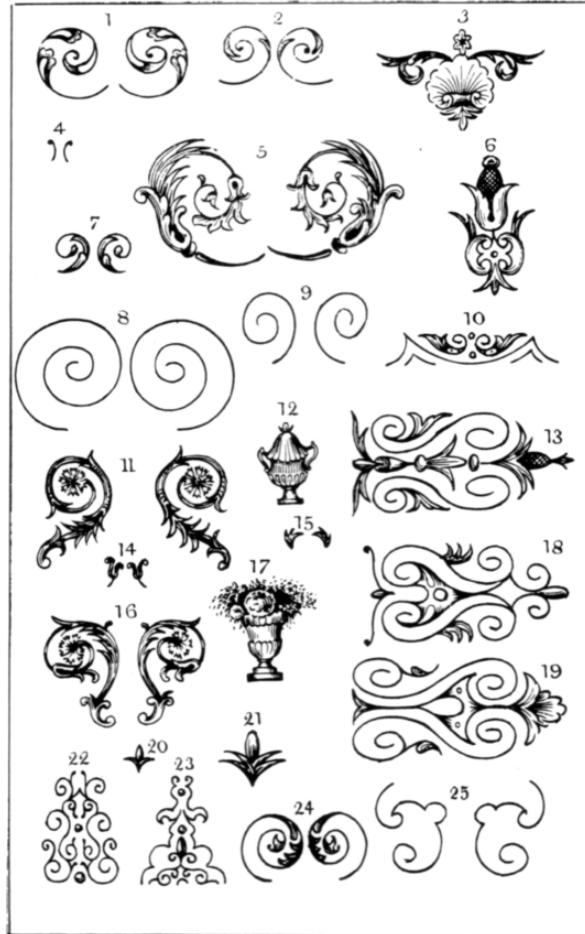
When the Art of Bookbinding had made some progress in this country, expensive materials were used for the covers of books, but the taste for finishing was but little known and understood. The

bindings in the British Museum, formerly belonging to Queen Elizabeth, James I, and Charles I, are not destitute of some taste, but the gilding is too crowded, and effect consequently lost.* The French binders at this period were far in advance of those of any other country in Europe, as is evidenced in the bindings of the books in the Royal Library, Paris; but more particularly in those of the great patron of bookbinders, Grolier, Treasurer of France, and subsequently in those of the Chevalier De Thou.† These artists, the most celebrated of whom were Gascon, Du Sueil, Pasdaloup, and De Rome, however, achieved a reputation for themselves, and for France, which their successors did not retain, and the art sunk again into the same tasteless decoration seen in other countries. Unmeaning subjects—birds, flowers, ships, castles, &c., were placed on the backs in utter confusion, without any attention to the fitness of the subject to the contents of the book. A ship or a church might be seen on a work on botany or entomology, whilst flowers, insects, and birds, graced architecture or navigation. Matters took an improved direction in this country, when Roger Payne gave the first stimulus to the present taste in the art. This was an era in the art of bookbinding the most important as respected taste in finishing, and an influential example on living and future artists. The London binders of the present day have contributed many improvements in the

* See Part I, page 78, &c. † *Ibid.*, p. 139, &c.

style, and expedition in the mode, of working the ornamental department of binding; and judging by the numerous specimens we daily see issue from the offices of some of the most celebrated, it would almost appear that the art was not capable of further progression. But it would be premature to pronounce this, seeing the rapid progress that has been made in some departments within the last two or three years, which would give good promise of its attaining that perfection in proportion, taste, and beauty, which has not yet been fully arrived at. The taste and talent here alluded to are, however, taking the great mass of the trade into consideration, confined to a limited number of the most distinguished professors of the art. This is but too fully proved by the deficiencies in the branch of which we are now particularly treating, seen on the covers of many of the bindings of our own day.

It is therefore a subject of the utmost importance, in the selection of tools for gilding, that the party have a good knowledge of the style of binding peculiar to the day, and a quick perception of the beauty of this kind of ornament, the general bearing of the designs towards each other, and their geometrical fitness for application when combined, so as to produce a series of patterns from the same tools. Without this, as may be seen in many offices where judgment has not presided in the selection, a large and expensive collection of tools may be provided, which cannot be blended together without offence to the eye of taste,



Morris & Co. Printers &c. to all Publishers. 33, Newgate Street, London.

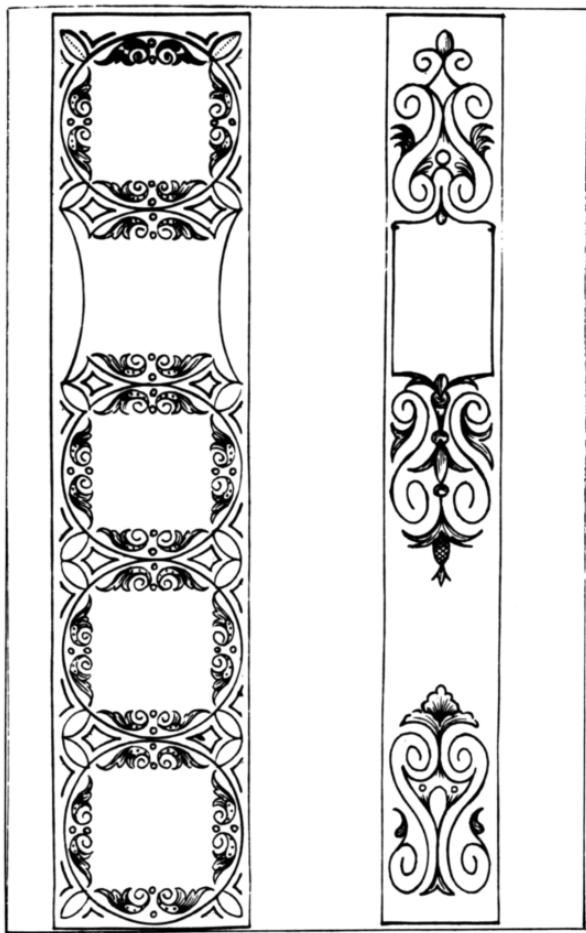
from the defect presented in the complete design, which even one unfit tool will cause. To assist the binder in so important a point in Finishing as the combination of tools, will be the object of this section of the work ; and it is hoped that, if attention be paid to the directions laid down, no one can fail, with a well-selected assortment of good tools, to form a very extensive series of scroll ornaments, flowers, &c.

As all combinations are composed of a variety of ornamental tools and plain lines, it becomes of necessity not only a matter of taste, but of expense, with the binder, in the selection of the former. But of the latter it will be economical to possess himself of such as he will find constantly required, one or other being introduced in almost every design he may wish to execute. The cost of a set of gouges, half circles, and plain lines, will be trifling, and their frequent application renders them necessary. He will also find that a similar set of circles and three-quarter circles, though not so constantly required, are not less requisite in an office where work of a superior character is to be executed. These, and the tools proper for his use, his improved judgment will teach the workman to select ; and the examples designed and engraved for this work, from tools and ornaments executed for this purpose alone, by Morris and Co., engravers, Ludgate Street, London, in illustration of the subject, cannot fail to assist him in multiplying the designs to an almost endless variety.

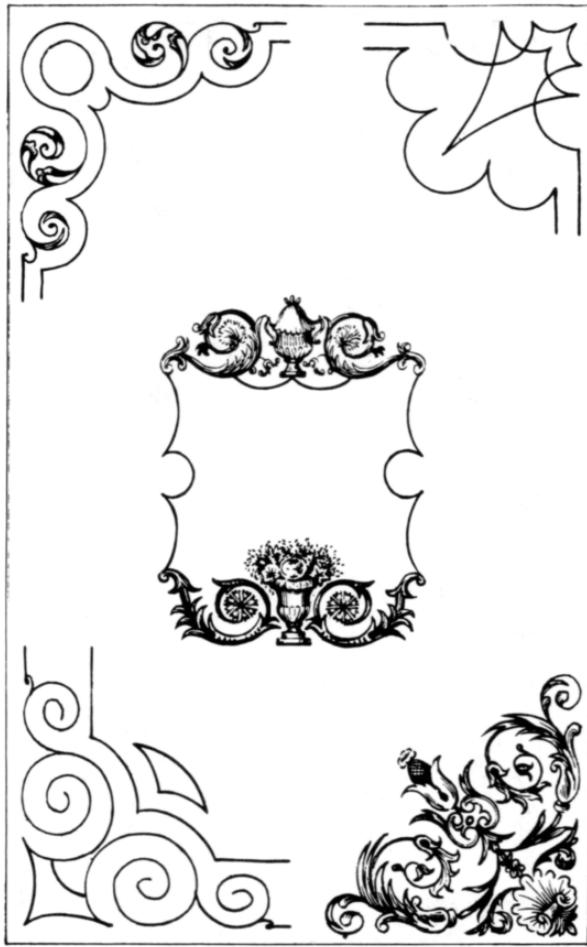
Plate I. is a representation of a small collection of tools, numbering from 1 to 25, with which, and a few gouges and plain lines, the designs figured on the other plates are formed. These will be referred to by the numbers affixed to them.

In plate II. are designs for two backs of books. The first figure, which presents an appearance of exceeding richness, is executed with one sole tool, viz. No. 10, and a small gouge for the sides of the lettering-piece. The back is marked into five compartments, the exact size of the tool from point to point, and the tool worked five times across the back, so as to form the upper part of the square. This done, the volume must be turned, and the ornament executed on the bottom of the square. The sides must in like manner be worked, and the gouges on the side of the title-piece. The design will then be complete; but the greatest care will be required in observing that the tool fits exactly at the corners, as it may readily be perceived that, unless it does so, the circle formed by the four applications of it, will present a disagreeable effect. To insure a certain precision in cases where the combination is difficult, it is better to work off the design blind, before preparing the book for gilding.

The other design is formed of three tools, the upper two of which are joined together, so as to form a space for the lettering, by a single line tool; the tools are numbers 13, 18, 19. The book should be marked for the lettering-piece, and the figure 18,



Printed by W. S. & Son, 48, Fleet Street, London.



at the head, guided by the line, as also No. 13 underneath. The tail of the volume will be the proper guide for 19. These tools do not present any particular combination, but their introduction serves to illustrate this peculiar style, now much in fashion. It will be seen, that any one of the three would answer the same purpose, by being applied three times on the back, and the sides of the title finished off by a plain single line. Also, that, by altering the position of any of them, a number of designs might be obtained.

Plate III. presents a diversity of ornament, viz. a lettering-piece, or centre plate, and four corners of various styles.

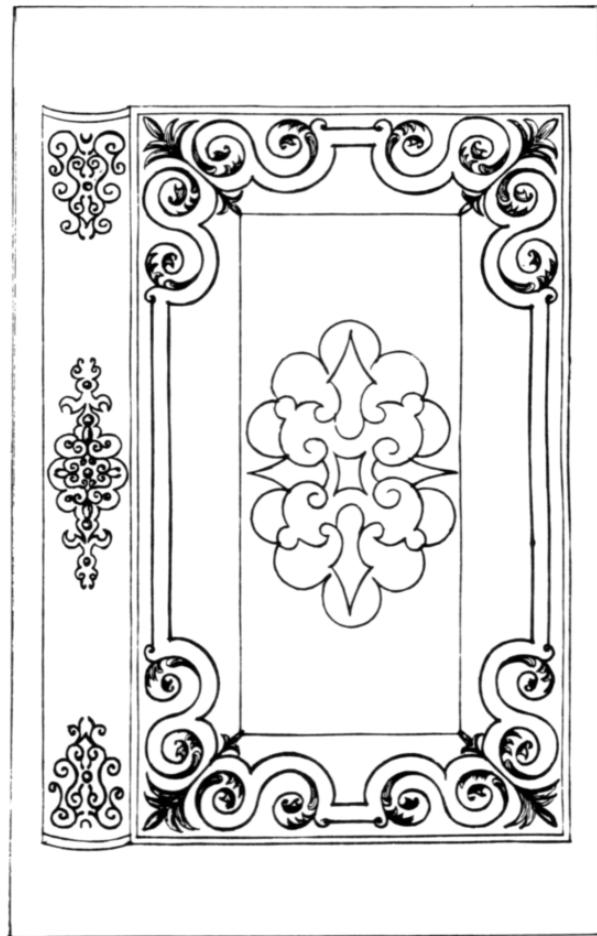
The lettering-piece is composed of a number of tools, figured 11, 12, 14, 15, 16, 17, two gouges, and a three-quarter circle. As it is most important that it occupy the true position, inclining neither to the left nor to the right, the design must be drawn on a piece of paper, and pasted at two or more points on the back of the book, and the tools be worked through. After the paper is removed, if on calf, and a coloured title required, a piece of morocco, pared as thin as possible and slightly damped, must be laid on the back, and pressed down with the palm of the hand till the whole of the tooling shows through. Then take it off, cut the edges with scissors, pare it round, and paste it on. In this design the first tool proper to be placed will be number 12, and then 17, taking especial care that

they are exactly in the centre. These done, the pair of ornaments, figure 16, must be impressed at the top, one on each side, as shown in the engraving, and in like manner the other pair, numbered 11, at the bottom. The gouge and circle on the sides, and under the urn at the top, must be added, and the open spaces filled up with figures 14, and 15, as seen in the design.

The corners will be worked true, provided the boards have been cut perfectly square, but to insure a greater precision, it will be preferable to work them on a triangular piece of paper, and prick the points through on the book. The first corner at the head of the plate is formed from figures 1, 2, and 4, and three or four gouges and circles. The circular corner is first worked, then the first pair of scrolls, one on each side. Each scroll is farther lengthened by the addition of figures 2, and 4. The plain gouges inside are then worked at parallel distance from the others and the corners joined to each other by a plain fillet.

The other corner at top is composed of line tools only, and worked in a similar manner to the above.

Figures 4, 8, and 9, with two small gouges, are only necessary to form the first corner at the foot of the plate. The larger gouge being worked on each angle from the corner, figure 8 must then be applied, one on each side, and then, branching onwards, figures 9 and 4. The large gouge is then



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again worked twice in the centre, parallel with the scrolls, and once a little more advanced, adding a smaller gouge to it twice, as seen in the design. This gouge is also worked once near the corner, connecting the two large scrolls.

The last corner is of a more ornamented description, and formed of figures 3, 5, 6, and 7. To insure its occupying the exact position, if not previously worked on paper, a line should be marked from the corner towards the middle of the book, at equal distances from the two angles of the sides. Figure 3, will be the first to be worked off, and be then joined by number 6, both occupying the centre of the line. The side ornaments, number 5, must then be added, one on each side, and finished by the small scrolls 7.

In plate IV. we have the figure of a book open, showing the back and front side of it. The back is ornamented by numbers 22 and 23, the latter being worked double in the middle. As shown before, these tools would make several different patterns. The design round the side is formed by the union of four tools, 4, 20, 21, and 24, with two small gouges and a plain line. Being marked as before directed, figure 21 is impressed in all the corners and lengthened out with the plain line to the point where number 20 joins. One of the scrolls, 24, is then worked in the angle of the corner tool, and the other in the opposite angle. These are then repeated in such way that the end or point joins the one first

put on, and the whole terminated by figure 4. The two gouges are then worked in parallel lines with the scrolls, and the whole finished by placing number 20 at the angles, to form the interior square. The lines connecting the designs at the corners, and forming the square, are executed with a plain fillet, taking care that it does not disfigure the other ornament by extending over. The centre piece is composed of number 25, and some of the gouges worked up in the designs before described. The middle of the square will be ascertained by folding a piece of paper, as directed for the arms, and in this case working the design and pricking it through on the book. The small square being formed, by working the gouge four times, figure 25 must be placed on, twice each ; the four points must then be executed by working the gouge eight times. After this, the design is completed by working the half circles inside, and by the addition outside of the half circle eight times and three-quarter circle twice, as shown in the engraving.

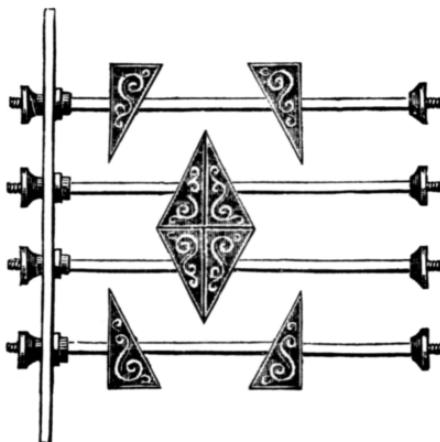
The examples given will be sufficient for the intellectual workman to conceive many patterns which his taste will suggest, forming an infinite variety of beautiful designs. In all combinations, a rigorous observance of the symmetrical proportions of the tools must be his first care, so that the union of any number of designs present a form agreeable and chaste. It would be superfluous to add more ; but from the importance of the subject, on closing the

directions for the ornamental department of binding, it may be repeated, that there is no greater evidence of the ignorance or carelessness of the workman, than an ornament of any kind unevenly or unequally worked. Let the young binder especially bear this in mind: it is a defect which nothing can effectually remedy; instead of an embellishment it is a detriment to the binding, and his reputation as a clever workman is consequently placed in jeopardy.

In many designs, the corner pieces are combined so as to form the centre ornament on the sides of books. This, however, takes a considerable time in the execution, the tool having to be applied eight times on each side. For greater expedition in working this style of ornament, Mr. Bain, of Broad Court, Long Acre, contrived an ingenious method, for which invention he was presented with the silver Isis medal, and five pounds, by the Society of Arts.

The economy is effected by employing four triangular *blocks*, capable of being fixed in a simple adjustable frame, so as to suit the size of any book. The frame on the left holds the rods parallel to each other, having a groove for them to be set at any required distance. The blocks are perforated to slide on the rods, and are fixed to their positions by small set screws at their back, which bind upon the rods. The small screws at the ends of the rods are to prevent the blocks falling off before they are adjusted. The following sketch represents the whole arrangement.

When the corners are done, if the same ornament is intended for the centre, they may be transposed on the rods, and the work executed, but it will save time to have blocks for both, as the ornament will be more uniform, and a certainty of being placed in the



centre insured. The impression is given by placing the book and design in the standing press. This method is now superseded by the blocks referred to at page 95, and more fully noticed in the Chapter on Presses, Tools, &c.

POLISHING.

The details of this operation, which is performed immediately after the gold ornaments have been worked, has been reserved for the last section of

Part II., in order that the whole of the ornamental department might be kept together. Morocco, roan, silk, and velvet, and the blind ornaments on any substance, must never be submitted to the action of the polisher. A smart rubbing with a piece of rough calf will be sufficient for the two former, and the velvet or silk will merely require cleaning with any smooth substance, or with India-rubber.

There are two polishers, one for the back and bands, and another for the sides, both of which will be described in the Chapter on Tools. The oil applied on the cover previous to laying on the gold will be sufficient to make the polisher glide easily over the surface. The polisher must be heated, and well cleaned on a board, and passed quickly and evenly on the back, sides, or joints, as the case may be, taking especial care that it is not too hot, as the glare would thereby be turned white, and the work damaged in appearance, nor so cold as to give a bad polish.

The book, as gilt, must be first polished on the back, by taking it with the left hand, and applying the other end against the stomach, and polished with the right hand by gliding backwards and forwards the smooth part of the polisher on the whole extent of the back. Should bands have been placed, it will be necessary to apply the polished corner of the iron on each side, ranging across the back. This not only polishes the surface, but smooths down the indentations formed upon the leather by the gilding-tools,

bringing up the gilding to the surface. The polisher must be passed on such places only as it is wished to make brilliant, and great care taken not to touch the places intended to be left dull.

The sides are similarly polished, by laying the volume on the table, covered with baize, and passing the large iron quickly over, first from the fore-edge towards the groove, and then by turning the volume in a contrary way, from the tail to the head.

If the joint requires polishing, the book is laid before the workman, the tail towards him, and the iron applied on the side next the groove, polishing the whole length of the board; then turning round the volume, and bringing the gutter towards him, he polishes the side on the fore-edge, and turning again, completes the whole by polishing the parts at the head and tail, applying the iron very forcibly on the corners to reduce their thickness.

In addition to polishing, it is deemed desirable to give to the sides the greatest possible smoothness by pressing them between polished tins or horns. These are placed on each side of the book even by the groove, put between pressing boards, and screwed tightly in the press, and left for some time. In conclusion, we here give two receipts for

VARNISH,

as used in bookbinding. The first, by the celebrated *Tingry*, will be found the most available in practice,

and the best composition as yet known, from its brilliant and drying qualities.

Put into a vessel six ounces of mastic, in drops, three ounces of sandarac finely powdered, four ounces of coarsely-broken glass, separated from the dust by a sieve, and thirty-two ounces of spirit of wine, of about forty degrees; place the vessel upon straw in another filled with cold water; put it on the fire and let it boil, stirring the substances together with a stick, to keep the resins from uniting. When the whole appears well mixed, put in three ounces of turpentine, and boil for another half-hour, when the whole must be taken off and stirred till the varnish and the water in which it is placed cools. Next day, filter it through a fine cotton, by which means it will acquire the greatest degree of limpidity, and well cork up in a bottle.

The other receipt is given by *Mons. F. Mairet* of *Chatillon sur Seine*, and may be prepared similar to the above. The ingredients are three pints of spirits of wine, of thirty-six to forty degrees, eight ounces of sandarac, two ounces of mastic in drops, eight ounces of shell-lac, and two ounces of Venice turpentine.

The varnish is first put on the back of the book with a camel's-hair brush as lightly as possible. When nearly dry, it is polished with a ball formed of fine white cotton, filled with wool, on which has been rubbed a small quantity of olive oil, to make it glide freely; it must be rubbed at first lightly, and as fast

as the varnish dries and becomes warm, more sharply. The sides are in like manner polished one after the other.

Varnish is applied more particularly on black coloured books, or such as have not been polished with the iron, but may be used on any books when found not sufficiently brilliant. In the latter case, the volume should be perfectly dry, or the varnish will not take. The application of this composition has also the effect of preserving the covers from some accidents damp is likely to occasion.

Messrs. Barritt and Company, of Fleet Street, London, have also invented a Caoutchouc Polish for Leather or Cloth Book-Covers. It is used by passing a sponge moistened with the composition over the covers, producing a brilliant polish, impervious to damp.

PART III.

OF STATIONERY, OR VELLUM
BINDING.

THIS branch of the Art of Bookbinding, in large towns, is a distinct business, and presents some difference in the mode of proceeding in several of the manipulations required. These, as in previous parts of the work, will be minutely entered into for the instruction of the young workman, whilst those which are executed in the same manner as directed for printed books, will be merely referred to in the order they will be required to be executed.

Stationery Binding includes every description of paper book, from the *Memorandum*, which is simply covered with marble paper, to the most firm and elaborate bound book used in the counting-house of the merchant and banker. Of the more simple and common bindings, it will not be necessary to enter into minute details, proceedings being the same as for others, only omitting the more expensive operations, the price allowed making it necessary to bind them in a more simple manner. The first proceeding, should the work require it, will be the

RULING.

This is done by a machine or by the hand. An engraving of the ruling machine will be found in the fifth part of the work. Where an office possesses one, after the pens are adjusted to the proper pattern, the work will be speedily accomplished, and an uniformity presented that no hand ruling can effect. The description given with the engraving will fully explain the mode of operation. When once set to the pattern, and the pens properly cleaned by running a piece of thin brass latten through them, it will only be necessary to keep up an equal supply of ink, to see that each line is clearly marked, and that the double ones do not run blind.

As it would not be found advisable to introduce a ruling machine where this description of work is limited, it may be requisite to give particulars relative to hand ruling, which will be found necessary to execute in every office, premising only that the laying open the paper for both will be the same. The paper, which is generally procured from the wholesale stationers, ruled with blue lines, unless previously done, must be opened out by breaking the back of the fold, and refolded evenly in small sections.

The pattern for the red lines being placed in front, the whole must be knocked evenly up at the back and head, put between boards, the top of the paper

projecting, and screwed in the laying-press. Then with the saw let the marks of the red ink on the pattern be sawn across the whole, which will denote the places for the lines on the right-hand side pages throughout the book. In like manner, placing the pattern on the other side, and sawing the bottom of the paper, will the marks of the left-hand pages be denoted. Care must be taken to leave a larger space on the fore-edge to allow for cutting. Should a head line be required, it must be similarly marked on the fore-edge of the paper. This done, re-open the whole of the sections, and, with a round ruler and tin pen, proceed to rule the whole of the head lines on one side of the paper. This, as well as every division of *£. s. d.* or other distinct column, must be ruled double, as close as possible, taking care that both are distinct, and that they do not run into each other. The head line being completed on one side, turn the whole of the paper, and operate in a like manner on the other. Then turning the paper, so as to have the head lines to the left, proceed to rule the columns marked for the *date, amount, &c.*, taking especial care that the pen always commences by the line at the head, and that it never entrenches on the space above, which would disfigure the work. As for the head line, so here the whole of one side of the paper must be completed before the other is commenced, attention being paid to each line being perpendicular, clear, and as even in colour as possible.

INKS.

To give to the work the best effect, it will be necessary to be provided with good inks, and it being connected with the subject, some receipts for their preparation are subjoined.

RED.

Half a pound of Brazil dust, half an ounce of cochineal, a little alum, and four quarts of vinegar. Let them steep for twelve hours, then strain for use.

ANOTHER.

Boil in a quart of soft water a quarter of a pound of Brazil dust; when boiled, put in one ounce of ground alum, one ounce of white stone crystal, and boil for three minutes, and strain.

BLUE.

The *liquid blue* at page 238, mixed with water to the shade desired, will be found to answer every purpose. But as this liquid, if used in the manufactured state, will, what is termed, *run* on the paper, it will be necessary to kill the spirit contained in it previous to using, which is done as follows:—

Put four ounces of ground alum in a basin, and two ounces of salts of tartar in another; then pour on each two pints of boiling water and let them stand for one hour, when add the two together, and they will bubble as if boiling, and turn white. After remaining

two hours, tie a cloth round the basin and let the water run off gradually. Pour over the sediment remaining a kettle full of boiling water; let it then remain until dry, when cut it into small pieces, and put them to the *liquid blue*. After remaining two or three days, the spirit will be wholly out. Common chalk is by some considered equally effective.

BLACK.

Half a pound of nutgalls, a quarter of a pound of sulphate of zinc (white vitriol), two ounces of gum arabic, and a handful of salt. Boil the nutgalls half an hour in three quarts of soft water, then put the whole together, and let stand for use.

ANOTHER.

For making a larger quantity, put in ten gallons of rain water, five pounds and a quarter of nutgalls, well bruised, one pound and a half of logwood chips, the like quantity of copperas, and a quarter of a pound of alum. Let them stand a few days, and then add two ounces of gum arabic and an ounce and a half of verdigris. Stir them all well together two or three times a day for a fortnight or three weeks, and the ink will then be fit for use.

FOLDING.

The whole being ruled, it will be proper to fold the book to the size required into sections for sewing.

The number of leaves in each must depend on the thickness of the paper and size of the book, taking care that there are not so many as when cut, to cause the leaves to start, or so few that the backs will be swollen too much by the thread. Then place the whole evenly in the standing-press for some time, and prepare the end papers, which must be of blank paper, and outsides, unless the work is of a superior description. Should leather or cloth joints be placed, it will be necessary to sew them on with the end papers, as before directed.

SEWING.

The sewing of Stationery differs much from that of printed books. To allow of the greatest possible strength, elasticity, and freedom, they are sewn on slips of vellum without being marked with the saw, and the whole length of each sheet, with waxed thread. For small books, two slips will be sufficient; for foolscap folio, three will be required; and where larger, the number must be increased, according to the length of the back, leaving a space of about two inches between each. The plan laid down by *M. Lesne*, page 225, might, perhaps, be adopted here with fine and light work to great advantage. The slips should be cut about an inch wide, and of sufficient length to extend about an inch over each side of the back. This portion being bent down at one end of the slips, they must be placed under the end-paper on the table, at such places as may be

deemed proper, and the section sewn the whole length; and so followed by every portion till the whole are attached in the same manner, taking care that the slips retain a perpendicular position, and that the back be not too much swollen. Should a morocco joint have been inserted, it must be sewn on with strong silk of the same colour. When finished, the coloured end-papers, if any, must be pasted in, and the first and last ruled leaves similarly attached to the end papers. If joints, the same precautions must be adopted as before directed. The book may then be beat even on the back and head, placed again in the laying-press, and glued up, working the brush well on the back, so as to force the glue between the sections.

INDIA RUBBER BACKS.

In those instances where the leaves of a book are held together by caoutchouc cement instead of by sewing, the sheets are cut up into separate leaves, and every leaf made true and square at the edges. The back edge is then brought to a rounded form, by allowing the sheets to arrange themselves in a grooved recess or mould; and in that state the leaves are all moistened at the back edges with a cement of liquid caoutchouc, or India-rubber. The quantity so applied is very small, but it is at the same time sufficient to enable all the leaves to cling very tightly together by their back edges, while the nature of the composition gives elasticity to the book. The liability

of some of the leaves becoming detached, has however, almost caused this style of back to be abandoned.

CUTTING.

When the ends and back are dry, this will be the next operation. Here the fore-edge must be cut first. It is done before altering the form of the book, but exactly as in printed works, paying great attention to the knife running evenly across, so that the column nearest the front is not cut too close, and is parallel to the edge. When taken out, the back must be rounded with the hammer, in a greater degree than for other bindings, and placed again evenly in the standing press. After remaining a short time the head and tail must in like manner be cut, but offer no difference in operation. The book will now be ready for colouring the edges; all the proceedings for sprinkling are the same as at page 236, but as the marbling is of a distinct character, it will now be detailed at length. The kind used in stationery binding is called

DUTCH MARBLE.

The *colours* used are the same as for other marbles, and ground up with the wax in a similar manner. The size and preparation of the colours, &c., are, however, different, and therefore require to be minutely described.

The Size.—Put in any vessel half a pail of soft water, and dissolve therein three ounces of gum dragon, stirring it from time to time for two or three days till the whole obtains a consistence strong enough to support the colours, and prevent their mixing with it. It should be made stronger than necessary to use, so that any portion that may have been weakened too much in the trough by the addition of water, may be readily strengthened by more gum.

The Gall.—To the gall of an ox add eighteen grains of camphor dissolved in twenty-five grains of spirit of wine, and beat the whole well together. This preparation should not be made long before it may be required, as it will not keep.

Preparation of the Colours.—As for other marbles, a portion of each colour must be put into separate cups ; they must then be well mixed up to a proper consistency with the prepared gall, and trial made on a *small portion* of the size. If they extend too much, more colour must be added ; if not sufficiently, a further portion of the gall. By this means too, trials of the strength of the size will be made. This is done by agitating the colour with a pointed stick. If it extends itself, and forms the volute well without mixing with the size, it is strong enough ; but if the colour does not turn easily in the direction of the stick, it is too strong, and will then require water to be added and well beat up. If, however, the colour extends too much, or mixes with the size, it will require more of the reserved size to be added, and well mixed

together. At each trial thus made, the *portion* used should be thrown away, and fresh taken. When the size is ascertained to be of the proper consistence, it should be poured into the trough, about an inch in height, and the marbling proceeding with.

Clear off the top of the size with a piece of waste paper, and having prepared the colours as above directed, proceed to lay them on. For this description of marble, instead of brushes, the colours must be conveyed to the places desired with quills or iron pencils. For example, suppose the marble to be formed of four colours, red, orange, blue, and green: the red is drawn across the size in various places, then the blue between, and afterwards the orange and green in the spaces between the first two, in such manner that the whole of the surface of the size is completely covered. Then taking the *comb*, draw it across in a contrary direction, that is from left to right, so that the colours run into each other in a jagged form. Let this be done in various places, and then the spaces left in like manner from right to left, till the whole assumes one body of diversified forms. Then taking the book, dip in this case the fore-edge first, and with the precautions directed for the other marbles. After clearing off the refuse colour, proceed in the same way with the head and tail, and leave the edge to dry.

Marbles with volutes, or any other fancy design, may be formed with a pointed stick and proceeded with in the manner directed above. Further detail will not be necessary, but it may be advisable to direct attention to the instructions laid down at page 242.

BOARDING.

The next operation will be the preparation of the boards for the side covers, which should be formed of two or three milled boards pasted together. These must be cut to the proper size with the plough, so as to leave a perfectly even edge, and will require to have a larger square allowed for that usual in printed books. When cut they must be pasted together, leaving, if the book is heavy and the slips on which it is sewn thick, a space at the back to place them in. The book must now be headbanded, and then it will be proper to strengthen the back of the book by glueing across, on the spaces between the slips, strong pieces of canvass, and at the head and tail a piece of calf, leaving projections on each side to be attached to the board. For additional firmness, it is usual, where the work is of a superior description, to sew the length of the book with catgut in about ten or fourteen places, according to the thickness. This is done by placing three slips of strong leather in spaces between the vellum ones, and sewing as at first, by which means the gut crossing over the leather and under the vellum slips on the back, appears inside on the spaces where no thread has before passed. For ornament, another thread is twisted round the gut on the back, so as to present the appearance of a double cord. These matters being adjusted, the slips of calf at the head and tail must be let in by cutting the end of the waste

leaf and placing them under. The other slips, of every description, after the trimming, must then be put into the space left between the boards, which should be previously well pasted or glued, the boards placed nearly half an inch on the back, and perfectly square on the sides, and the whole screwed tightly in the standing press for some time.

THE SPRING BACK.

There are numerous ways of forming this description of back, and as generally adopted in different offices. As in other particulars, two or three of the best will here be given. 1.—Having ascertained the width and length of the back, and provided a piece of strong pasteboard, or thin milled board, of little more than twice the width, fold one side rather more than half, and then the other, so that the middle space left will be the exact size required, which should be about a quarter of an inch wider than the back of the book; then cut evenly another piece, a little less than the width, then another still less, and so on for six or seven, lessening the width each time till the last is merely a narrow slip. Let the edges of the first, or cover for the whole, be pared, and laid open on the table; then glue the middle space, and place thereon the largest slip, which also glue, and add the next in size, proceeding in like manner till the smallest is fixed, taking especial care that each occupies the exact centre of the one

on which it is placed. Finally, glue the whole space and the two side slips of the first, which must be brought over and firmly rubbed down. Shape it to the curve of the back of the book, either on the back or a wooden roller of the same size, and leave it to dry, when the head and tail must be cut to the proper length with the shears. For greater security, the whole is often covered with linen cloth.

2. Cut a piece of firm milled board to the size required, and pare down the edges; then hold the board to the fire till it is found soft enough to model almost into any shape, and form to the back as above directed. The board is sometimes wetted, but does not answer so well.

3. A beaten iron plate of the exact size, and covered with parchment or leather.

Numerous patents have been obtained for this description of back. Among the earliest were those taken out by Messrs. Palmer and Williams, which have been long disused, as they were found to break from falls and other accidents. The specification delivered in by Mr. Palmer, in 1800, is here given, as an illustration of the early attempts made to improve this kind of binding:—

“There are certain various small bars of metal, or composition of metals, about the thickness of a shilling or more, according to the size and thickness of the book to be made, the length of each such bar being from half an inch to several inches long,

in proportion to the strength required in the back of the book.

“At each end of every such bar of metal is made a pivot, by being filed down or otherwise, and which are of different lengths, also in proportion to the thickness of two links, which they are to receive.

“There are a certain number of links, made rather in an oval form, to the said hinge, each of which contains two holes, according to the size of the pivots they are to go on, which links are of the same metal as the hinge, or a composition of metals, as is judged necessary; each of the said links being nearly the length that two of the above-described bars are wide.

“When such metallic pivots are prepared, the aforesaid links are then riveted on those pivots, each pivot receiving two links, and thereby holding the said hinge together, on the principle of a link chain or hinge.

“There are two holes, or more, of different sizes, as required on each bar of the hinge or chain, by which means each section of the book is strongly fastened to the same; which hinge so fastened operates with the back of the book, when bound in such an improved manner, that thereby occasions the said section to open in, so as to bring them on a parallel with each other, and in consequence thereof admit of the ruled lines being written into, even close to the back without any inconvenience.”

The spring back is only used for the superior kind of account books; for common work, a piece of thin pasteboard is merely laid on the back before covering, the stress on the back being small.

To prevent the manufactured back slipping during the operation of covering, it is laid on, and a piece of cloth glued over and attached to the sides, similarly to the back of a half-bound book. This tends also to materially strengthen the back.

COVERING.

The materials generally used for stationery binding are russia, rough calf, green and white vellum, and forrel, according to the value of the work. Previous to pasting on vellum and forrel, the book should be covered with a piece of strong paper, as if for boards. The process is the same as for other bindings; but when completed, it will be necessary to put the book in the standing press, having pieces of cane or wood for the purpose placed between the boards and the back, so as to form a bold groove, and force the leather close on the edge of the spring back. Previous to and after pressing, the head-bands must be squarely set, taking care to rub out any wrinkles that may have been formed in turning in the cover. Should the book be very large, it may be advisable to give it a nip in the press immediately after folding in the fore-edges of the boards, and then finish the covering by turning in the head and tail.

As circumstances, such as the fancy of some previous workman, or coloured vellum not to be obtained so early as required, may make it necessary to execute the proper colours, the proceedings are here given.

GREEN.

Put one ounce of verdigris and one ounce of white wine vinegar into a bottle, and place them near the fire for five days, shaking it three or four times each day. Wash the vellum over with weak pearl-ash, and then colour it to the shade desired.

RED.

To one pint of white wine vinegar, put a quarter of a pound of Brazil dust and a piece of alum. Cork the mixture up; let it stand in a warm place for two or three days.

PURPLE.

Proceed as for the *red*, substituting logwood chips for the Brazil dust.

YELLOW.

Half an ounce of turmeric to half a pint of spirits of wine, prepared as above.

BLACK.

Wash the vellum over three times with the red, and whilst wet colour with strong marbling ink.

Marbles and other designs may be formed on white vellum, but as the proceedings have been so fully entered into before, it will not be necessary here to repeat them. Where russia bands are not added, the end-papers must now be pasted down, and the lettering, &c. proceeded with. If bands are attached, the pasting down of the end-papers and joints must be deferred till they are executed.

RUSSIA BANDS.

To give to large books the greatest possible degree of strength, it is usual to affix russia bands to them. They are called *single* when they extend about half way down the sides, and *double* when those at the head and tail reach to the corners of the boards, and are turned over the edges in the same manner as the cover. For *single* ;—having ascertained the breadth by dividing the back with the compasses into *seven* spaces, cut three pieces of russia perfectly square and the exact size of the spaces they are to occupy, and paste them on the *second*, *fourth*, and *sixth* division of the back, thereby leaving in sight the first, third, fifth, and seventh spaces with the cover only; draw them squarely on the sides, and place the volume in the press, with the rods fixed to force the russia into the joints as before directed, and then leave to dry. Where *double* bands are to be placed on a book, divide the back into five spaces, or seven, if four bands. The middle band or bands will be short like

those above, and placed on in the same manner ; but those at the head and tail, which extend their whole length to the fore-edge of the boards, will require paring on the edge intended to be turned in at the headbands and over the boards of the book, cutting the corners and squaring the edges, as in covering. When done, press the whole, with the rods as before, to cause the russia to adhere well and evenly to the vellum or calf, and leave it to dry. The next proceeding will be to mark the places for the holes intended to lace in the white vellum thongs on the bands ; this done, the holes must be pierced with the bodkin, and the vellum passed through, crossing each other so as to form diamonds, squares, or other forms, as taste may direct. All being executed, by every part being evenly laid and tightly drawn, the thongs must be fastened inside, and well beat down with the backing hammer. When the end-papers are pasted, tins must invariably be placed inside during pressing, to prevent the impression of the lacing-slips on the leaves of the book.

CLASPS, CORNERS, AND BRASS BANDS.

Clasps are generally affixed to the better kind of stationery books, as keeping them closed when not in use, tends much towards their preservation. And for still greater security, they are often further protected with brass corners or bands. To hide the projection the clasps would make on the fore-edge, that part

of the board must be cut away to admit the clasp, so that when fixed it will be even with the edge of the board. For the corners and bands this is not done; but to insure a finished appearance in the whole, the workman's attention must be directed to their fitting exactly in every particular of length, breadth, and thickness. The clasps may be purchased of the makers, but it may be found necessary to place the making of the bands and corners in the hands of the brass-worker, to whom particular directions and sizes must be given. They must fit tightly to the boards, run exactly parallel with the edges, and have the holes for the rivets drilled through previous to placing on. Where corners are put on, no bands will be required. Bands which extend from the back to the fore-edge and form a corner equal to the breadth of the band, being squarely soldered in front, are placed at the head and tail of the book, and fastened with rivets in the following manner, as are also the clasps and corners. Pierce the boards with a fine bodkin in such places as are previously drilled in the brass, and force through brass rivets of a length sufficient to project about the eighth of an inch, and with heads made to fit exactly to the cavities formed in the bands; then fasten them firmly, by placing the heads of each on an iron, and beating down with a hammer the part projecting inside, till it is smooth and even with the surface. Bosses, which are seen fixed on the middle of the boards of old books, particularly of early-bound Bibles, &c., in churches, are fastened in the same manner.

FINISHING.

The placing of lettering-pieces, gilding, and blind tooling, is exactly the same as for printed books. Rough calf must be dressed with pumice-stone, cleaned with a brush, and ornamented blind, with the tools very hot, to form a dark impression. Vellum will require the tools cooler than calf. The book now being ready for the use of the accountant, necessarily closes the details of this description of binding.

PART IV.
OF BOARDING.

IN London and other large places, this is another distinct branch of the art, and consists of simply covering the book with coloured paper, or other common substance. In small towns, it must necessarily be executed jointly with the other branches ; but so ample and minute has been the detail of the various manipulations in a previous part of this work, that in attempting a description of BOARDING, little can be said without repetition. This style, too, being the commonest mode of doing up books in this country, also places the subject, under any circumstances, in a position requiring but little remark. Previous, therefore, to speaking of the few processes that are peculiar to boarding, it will only be necessary to observe, that the folding, pressing, sewing, backing, boarding, covering, and pasting down, are the same as for regularly bound books. It remains, then, to add, that the books will not require beating, and for common boards, are never cut round the edges. The leaves are only dressed with the trimming-knife previous to rounding the back, so as to present as

neat an appearance as possible, by removing every portion of paper projecting over the general line. For greater strength to the back, a piece of paper must be pasted in the centre of the coloured paper previous to applying it on the volume. When covered and pasted down, the printed label must be fixed evenly on the back, and the book will be finished.

CLOTH BOARDING,

Now so extensively adopted, offers nothing new for remark in the early operations, except that the covers are put on the boards with glue, as paste would tend to destroy the gloss on the cloth, by the damp striking through it. Where a great number of one work (which on first publication is generally the case) are executed at one time, it is usual to prepare the covers before placing them on the volume, by cutting the boards to the proper size with the plough, and covering them with cloth. A piece of stiff paste-board, of the width of the back, must be placed between the boards, which should be at a distance from each other equal to the breadth of the back and the allowance for the joints. This board must also be covered with the cloth at the head and tail, and when the case is applied to the volume, will form an open back. This mode is called CASE WORK, and executed as follows:—Back the volume, and cut off the bands or slips on which it has been sewn; then place it in the cover by pasting the guards (small

slips of paper), left over the end-papers, which answers the purpose of lacing. There are some other operations which it will be necessary to describe more particularly.

EMBOSSING AND LETTERING.

This has been carried to a great perfection on cloth, being executed with the *arming press* with ease and quickness. The front boards, or upper part of the backs, as the case may be, are rubbed slightly with oil, and the gold laid on; when, the squares on the bed of the press being adjusted to the right position, the lettering is executed as swiftly as they can be laid on and removed. If the boards have been laced in, the sides only can be lettered, by placing the whole volume on the press, the board laying open and flat on the bed; but if the cases are previously made, the lettering, &c., must be executed on the back or sides previous to fixing on the book. The size in the cloth, as now manufactured, will be sufficient to hold firmly the gold when stamped with the heated design. The portion not thus marked must be removed with the gold rag, and rubbed clear with a piece of fine woollen cloth. When lettered, it will remain only to paste down the end-papers, and the book will be completed. Embossed ornaments may be placed blind in a similar manner with the arming-press.

PART V.

ON MACHINES, PRESSES,
TOOLS, &c.

IN describing the various manipulations in binding a book, it has frequently been necessary to refer to the presses, machines, and tools requisite for their proper execution. Skilled and proficient as the binder may be, and however good the material he may have for use, unless he is aided by good presses and well-executed tools, his work will not present some of those important qualities of good binding laid down in previous parts of this treatise, viz., solidity in the forwarding, and true proportion in the finishing. In fitting up an office, it becomes therefore necessary for the proper execution of the work, and the consequent reputation of the binder, that he provide himself with machinery, &c. of the best manufacture only. True it is that the cost may be greater, but assuredly it will soon be amply repaid by the increased effect produced, and the consequent satisfaction which superior workmanship will always give to the possessor of a library. But, with judgment, a greater cost need not be incurred,

for, as has been before observed, the binder may be enabled to purchase the necessary and most approved articles for his establishment for a smaller sum than, without calculation and reflection, he would expend in procuring those of an inferior description. The fitness of the articles for the extent of business to which they are to be applied must be the primary consideration, and to enable him to judge which will be most applicable, as well as being a necessary portion of the work, will be the object of the present section, wherein will be given a detailed account of the most important presses and tools, and a description of every other article used in the art of bookbinding. For more ready reference, the subject will be divided into three classes, viz., presses and machines, tools used in forwarding, and tools required by the finisher.

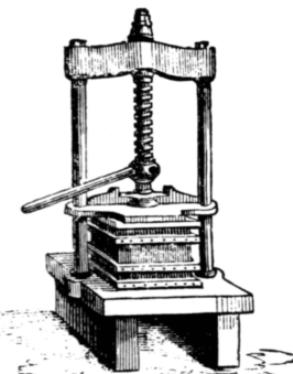
PRESSES AND MACHINES.

The most important are the presses used for compressing the sheets of a book as much as possible, so as to give the whole the greatest firmness. The most generally adopted is the

COMMON STANDING PRESS.

This consists of two upright cheeks of timber, of about seven feet in height, placed at a distance of from two to three feet from each other. At about six inches from the bottom, the bed, formed of a

solid piece of wood, is let in by means of grooves between the cheeks; and at the like distance from the top, another to form the head, in which is placed the box for the screw. The bed is about four inches and the head twelve inches in thickness. The screw was formerly made of wood, but the greater pressure acquired from the use of a well-turned iron thread, has caused the use of wood to be nearly discarded altogether. To this screw is affixed the swing-ing board, which works perpendicularly between the bed and the head of the press, and is raised or lowered by turning the screw in the box, by means of a small iron bar. To give to the press all the force possible, it is pulled tightly down with a large iron bar, five or six feet in length, and to which the united strength of two or more men will be required when the press is full. Others are made of solid iron throughout, as here represented. A winch is sometimes applied, to give additional force. Figure 4, in the annexed engraving, will tend to make these particulars fully understood.



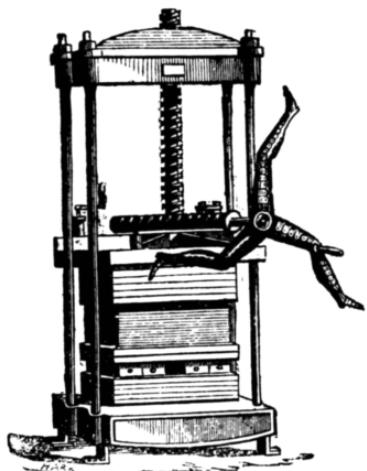
SOLID IRON STANDING PRESS.

THE ATHOL STANDING PRESS

is an improvement on the common press from the greater power of compression it possesses. It is formed of four upright cheeks of six-inch cast iron, having a bed and head similar to the one above described. The screw is generally four and a-half inches diameter, and worked in a gun-metal box by means

of a cog-wheel and worm of Athol power.

The great advantage in this press, in addition to its great pressure, is the small space in which it can be worked. No lever or windlass being required, the smallest space over that which the press occupies, will be necessary for the application of the force. It will not recede if left for any



IMPROVED ATHOL PRESS.

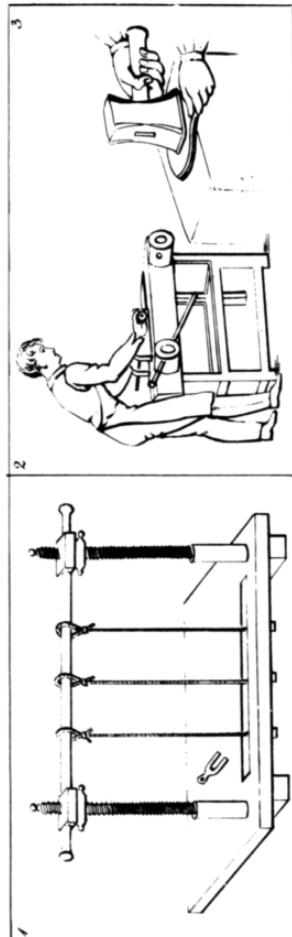
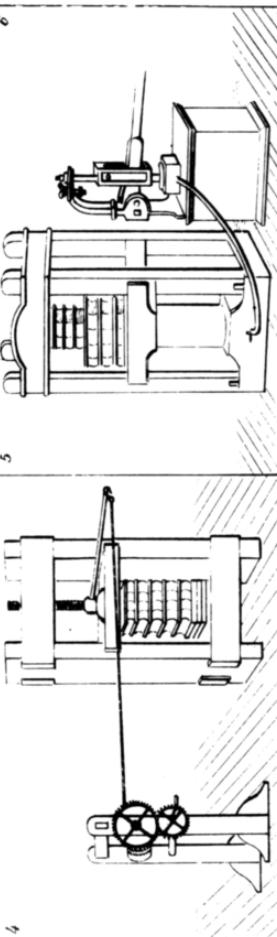
time, and possesses the further recommendation, that the concussion to the walls, floors, &c. occasioned by the jerk of the bar in the common press, is entirely prevented, as well as the damage the box in the head of the press is liable to sustain. A larger press on the same principle is manufactured,

which is employed in the pressing of paper. This press is the invention of Mr. Hopkinson, of New North Street, Finsbury, London.

THE HYDRAULIC PRESS,

which forms figure 6 in plate V., is the most powerful of any yet invented. It is manufactured by nearly all the press-makers, differing only in the general design, the application of the power being the same. The one shown in the plate is taken from that of Messrs. Cope and Sherwin, and by applying the water power to the *Athol*, with four cast iron cheeks, as before described, a just conception may be formed of that made by Mr. Hopkinson. The general outline of the press, it will be seen, is the same, but the application of the power from below, instead of above, as in the common *Athol* presses. The power of compression is derived from the pump to the right of the press, which is supplied with water from a cistern sunk under it. The water thus sent by means of the tube seen passing from it to the centre of the foot of the press, causes the cylinder to which the bed is fixed to rise and compress the books or paper tightly between the bed and head of the press. When it is forced as high as can be by means of the pump-handle seen, a larger bar is attached, and worked by two men. The extraordinary power of this press is so great as to cause, particularly in common work, a saving of more than three-fourths of the time required in

Montage und Anleitung für den Betrieb.



bringing books to a proper solidity by the common press. When it is wished to withdraw the books, the small cock at the end of the tube at the foot of the press is turned, the water flows into the cistern below, and the bed with the books glides gently down in front of the workman. Two presses are frequently worked by the same pump, one being on each side.

BARNES' STANDING PRESS.

This is an invention from America, and will be fully understood by the following report of the Committee on Science and the Arts of the Franklin Institute, to whom the press was referred for examination :—

“ This press embraces the following combination of simple machines, viz. a single screw in the centre of a cast iron frame, moving vertically through a nut or box in the upper part of the said frame, which box is supported, when the press is not in use, on a cross plate below, and when in action is kept down by the upper head of the frame. To the box is attached a toothed wheel of cast iron, on the upper surface of which, continuous with the surface of the box itself, is placed a circuit of ellipsoidal friction rollers, kept in their places by a flanch on a moveable ring of iron, and playing between the upper surface of the box and the under surface of the top plate of the frame. By the arrangements thus far described, it will be perceived that the screw may rise and fall

by revolving on its own axis, carrying with it the platten attached to its lower extremity by means of a knob or head of well-known application. The screw is made to revolve, by four arms fastened to the body thereof, just above the platten. With this arrangement the machine, in point of action, differs in no respect with the common screw press, but may be quickly turned in either direction, involving no serious loss of time in bringing the platten to and from its work. When, however, the pressure becomes too intense to allow the workman longer to turn the screw, the arms just mentioned are made stationary by a plug or plugs set into the platten, and the box itself is turned by means of a horizontal tangent screw applied to the tangent wheel already described. It is now that the friction rollers come into play, preventing, to a considerable extent, the resistance which would otherwise proceed from the action of the box against the roller in the top block against which it plays. The axis of the screw has a winch of convenient length, by which it may be turned as long as it is thought practicable; and it also carries a toothed-wheel, which is capable of being acted on by a pinion of much smaller diameter, that may be thrown into gear at pleasure, and to which the winch may be then transferred. This third and last mode of giving motion to the press is only required when extreme pressure is to be communicated.

“The committee think the advantage of three

rates of speed in this press will commend it to the attention of manufacturers, who have often found cause to complain of the loss of time involved by the common hydrostatic-press, with a single forcing-pump, and equally so by those screw presses in which the whole range of motion was to be effected by a comparatively slow process.

"As the inventor does not confine himself to any particular scale of dimensions, we have not deemed it necessary to make a statement of the calculation applicable to the press which we have examined, further than to remark, that it multiplies the force applied 10,000 times, and when operated on by a single man capable of applying sixty-six pounds, may, exclusive of friction, apply a pressure amounting to about 200 tons.

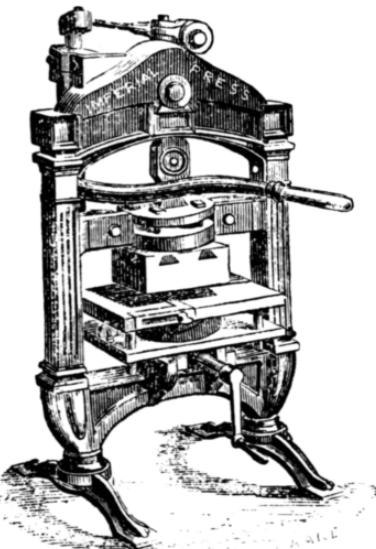
"WILLIAM HAMILTON, Actuary.

"June 11, 1835."

ARMING PRESS.

The next important press is that used for giving to the covers of books many of those decorations which could not be done by hand or through the medium of the presses above described, from the inadequate pressure of the one, and the liability of error in the other. Arming presses are manufactured of various sizes, and according to the taste of different makers, varying in design. The principle of all is nearly the same, and we shall therefore, to avoid repetition, confine the description to the *Imperial Arming*

Press, invented by Messrs. Cope and Sherwin, of Cumberland Street, Curtain Road, Shoreditch, London, which is on the same principle as their Imperial Printing Press. The annexed engraving will display the general outline of the staple or standard of the press. The bed plate is constructed with a contrivance for raising or lowering it, according to the thickness of the plate to be applied. This is effected by means of two series of circular inclined planes, placed one above the other, similar to the clutch box used for engaging and disengaging certain parts of machinery. When placed in the proper position, it is fastened by a pall which takes into a ratchet on its lower edge. Upon the bed are fixed two parallel rulers at right angles to each other, to insure precision in the work. The carriage on which the bed is placed, traverses backward and forward by means of a screw put in motion by the handle in front. On



ARMING PRESS.

the piston which supports the heater-box, to which the plate or die is to be fixed, is seen the adjusting screw; and under the projecting head of the press a strong spring is attached, to raise and support the piston, with the heaters, &c. In front of the heater-box, or platten, are holes for the two heating-irons, and between them the groove in which the design is fixed. The impression is given by means of the handle, which working on the connecting rods at the top, causes the main bolt or axis, which in a state of rest lies in an angular position, to assume a perpendicular one, thereby driving down the piston with great force; exerting a pressure adequate to the power and system of levers upon which it has been employed.

Others are manufactured by the same gentlemen, for small designs, where time is saved by not moving the carriage, but laying on the book, guided by the square, and taking the impression are preferable. But for working off large toolings and embossments, or extensive letterings, this press is invaluable to the bookbinder. To many other purposes all of them may be applied with equal advantage. The largest description of embossed covers, &c., are executed by means of a fly press of enormous power.

THE CUTTING PRESS.

The cutting or laying press is formed of two strong cheeks of timber, connected together with two wooden

screws and two square pins. These screws are from two to three feet in length ; the heads, in which are two large holes to introduce the pin, by which the books are firmly pinched between the cheeks, project out on the right side as seen in figure 2 of plate V. The screws are held firmly in the right cheek by two bolts, and in the left are cut worms for the screws to work in. On one side of the left cheek are fixed two slips of wood an inch and a half asunder, which forms a groove for the cheek of the plough to run in. This side of the press is used for cutting only. The other, which presents an even surface on each cheek, is applied to every other purpose where the laying press is required.

HARDIE'S CUTTING PRESS.

This press, an invention of Mr. James Hardie, book-binder of Glasgow, obtained a considerable share of attention from the trade in Glasgow and Edinburgh when first produced (A.D. 1805). The Society of Arts of London also voted the inventor the sum of fifteen guineas. The principal difference between it and the one described consists in being worked with one iron screw in place of two wooden ones. Instead of two cheeks, it presents a square frame, having a moving piece or cheek, which slides in grooves within the two sides of the frame ; the screw works in a nut let into the right-hand side of the frame, its lower end working in a collar, screwed to the moving piece. Though at first it was said to be more simple and powerful than the common press, and adapted to

work more economically, it has not by any means been generally adopted. This press is accurately represented in the engraving, figure 2, plate VIII.

THE PLOUGH.

This is so connected with the cutting-press, that it would not be proper to speak of it in any other than the present place. It consists of two light cheeks, drawn together by a single screw in the centre, and regulated by two pins, one on each side. In the right cheek is cut a groove, the thickness of the knife, which is fixed to it by means of an iron bolt, passing through the cheek, having a screw at the top to allow of its being firmly secured by a nut. The other cheek fits in the groove on the cutting press. See plate V., figure 2.

THE FINISHING PRESS

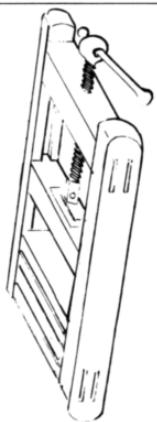
is exactly similar in construction to the LAYING PRESS, but smaller, and without any groove for the plough; further description, therefore, will not be necessary.

THE SEWING PRESS,

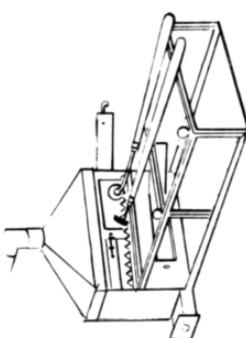
represented in figure 1, plate V., is formed of a bed of hard wood, having an opening extending within a few inches of each end, and an inch from the front edge. At each end of the bed is fixed a wooden screw, furnished with nuts to support the cross bar, on which the strings are fastened. This bar rises or falls, as the nuts are raised or lowered.

THE ROLLING MACHINE,

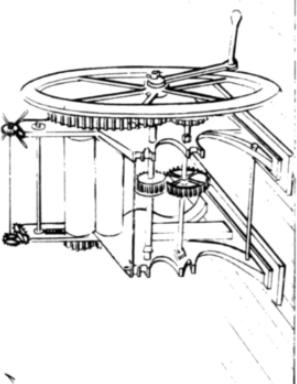
intended to supersede the necessity of beating, is a late invention. It is accurately figured in the annexed engraving, No. I., and we refer the reader to page 220, for a description of the manner in which the work is passed through it. The power of compression is given by the two iron cylinders, which are about a foot in diameter, the upper one of which can be regulated by means of the handle seen at the head, to any pressure required. On the frame, in a line with the space between the rollers, is placed a table or board, for beating the book up even, and more steadily passing it through. The handle of the wheel in front, being turned by a powerful man, gives motion to the others, and thus exerts a force on the rollers in a proportion of five-sixths over that of beating. A committee of the Society of Arts inspected one of these machines, and gave a highly favourable report of it. Among other works that was pressed before them, was a minion Bible, which was passed through the press in one minute. Mr. Burn was presented with the Society's silver Vulcan medal for his invention. For offices where much work is done, this press must be invaluable, from the great saving of time required in beating; but it may be doubtful if ever they can be applied with advantage generally throughout the country.



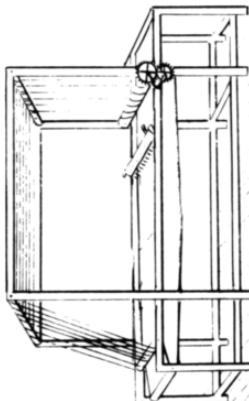
2



4



3



1

THE RULING MACHINE.

Figure 3, in the engraving VIII., shows the principle of the *ruling machine*. It is simple in construction, but remarkable for the facility and precision with which the most complicated and difficult patterns are executed by it. The general framework it will be seen is plain, and requires no description. The bed is made of baize, the ends sewn well together, and the exterior surface painted over to make it firm and smooth. This is placed round rollers at each end, which being turned by means of the winch, carries the paper laid on, under the pens, and passes round below the machine. The cords seen passing over the head, confine the paper firmly on the bed. These revolve on four rollers, one on each angle, having grooves for the cords, and are also set in motion by the winch. The pens for making the lines are let into the slide in the centre, and firmly fixed by screws underneath. The slide can be momentarily lifted up by the catch on the side, where head-lines or blank spaces are required. The ink is placed in a piece of double-milled flannel attached to the slide at the head of the pens, which being kept well supplied, the ink flows gradually and equally down as required. Where inks of different colours, such as red and blue, are necessary in one pattern, another slide is fixed at a short distance from the other, and both ruled at the same time. The near side of the machine, being at right angles with the slide, the paper, which

is cut true before ruling, is kept perfectly square by it.

Ruling pens are made of thin brass, cut up about an inch of their length, and formed by bending the two sides together, and cutting the ends to an exact point, leaving sufficient space for the ink to flow down the centre.

THE STATIONER'S CUTTING PRESS.

This press is similar to the one before described, but rests at each end on pivots, by which means the screws hang downwards, and the cheeks of the press are brought in a line with a table on the side. On this table a square is fixed, by which means the paper is placed in the press quicker, and a certainty insured of its being cut true.

Another mode adopted by some stationers requires description, being the readiest and most true of any other. A hand-screw is attached to a beam above, and hangs perpendicularly. Under this is placed a block, on which is fixed, what may be termed the cutting board, or table. The paper being laid open and even upon it, a board perfectly square and to the size of the paper is placed in the centre, and the screw above brought upon it and firmly tightened. This board has a groove for the plough, of a peculiar construction, to work in on every side. The plough being placed in one of the grooves, is then gradually worked in a similar way to the *carpenter's* plough, with both hands, till the whole

of the paper is cut though : the other three sides are then in like manner cut the screw unloosed, and the paper, which will be the exact size of the board, and perfectly square, taken away.

THE STATIONER'S PLOUGH.

The plough used for the common press is also the same as before spoken of, but the one used in the process last named will require description. It is formed of two cheeks, in the centre of the right hand side one of which the knife is fixed by a bolt. This is similar in shape to the common knife, but fastened in a groove in a perpendicular position, the point being even with the edge, which is of iron. The other cheek, which works in the groove on the board, is let into the first, and rises gradually as the knife descends in cutting through the paper.

PENNY'S CUTTING PRESS.

The above are convenient and efficient machines in the hands of experienced workmen, but it requires much practice to obtain anything like precision in their use. Various attempts have been made to produce a press possessing the means of adjusting itself, and insuring perfect accuracy, independent of any degree of skill possessed by the workman. A Mr. Penny, whose attention had long been drawn to these facts, succeeded in producing a machine possessing many novelties and improvements. This was attained by introducing a moveable stage for

receiving the paper or book to be cut, which being always parallel with the surface of the press, insured the requisite precision in cutting, all the edges being parallel to, or at right angles with each other.

This press consists of two cheeks like the common one. The two screws are of iron, and the moveable bed is raised or lowered by turning them. The two screws are turned by means of four cog-wheels, beneath the bottom of the press, motion being given through the medium of a handle on the upright shaft of the wheel, to the centre-wheel, which turns the others carrying the screws.

This press offers many great advantages : besides insuring perfect accuracy of workmanship, twice the usual quantity of paper may be cut at once, and with greater rapidity. In cutting and gilding of highly-glazed and other paper, there is no danger of falling through.

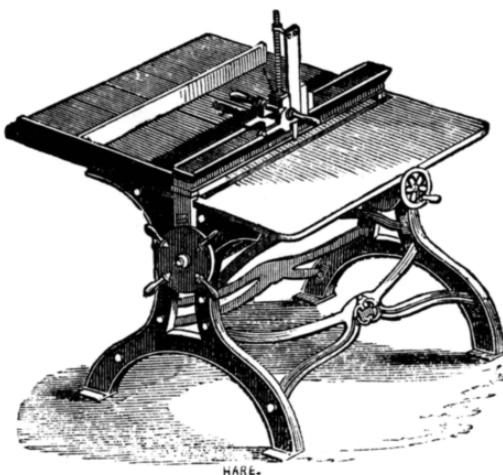
PENNY'S PLOUGH.

To effect the greatest possible accuracy in cutting, the above gentleman also invented a plough suitable to the press. The knife is fixed with two bolts, and the blade placed exactly under the screw. The bed for the knife is of metal, and the knife accurately finished, so that no tedious adjustment is ever necessary. Mr. Penny received a reward for this invention from the Society of Arts.

PAPER CUTTING MACHINES.

The stationer is now enabled by the use of the

Paper Cutting Machine to almost dispense with the Cutting Press. Many kinds of machines have been invented, amongst others the *IMPERIAL*, here represented, which has been extensively used for the



HARE.

last seven years, and is a very useful machine, where great varieties and small quantities of work require cutting. Mr. Wilson invented one on a larger scale, called

THE GUILLOTINE.

The patent he took out having expired, Mr. F. Ullmer, of the Old Bailey, became the manufacturer of the same, with all the later improvements, adding a continuous motion, which obviated the necessity

of turning the handle back after the paper had been cut, and also adapting it to steam power. This machine which is depicted on the opposite plate, is considered to be very superior. Mr. Furnival has patented a machine of this class; also, one on a reduced scale, adapted to the requirements of a small establishment.

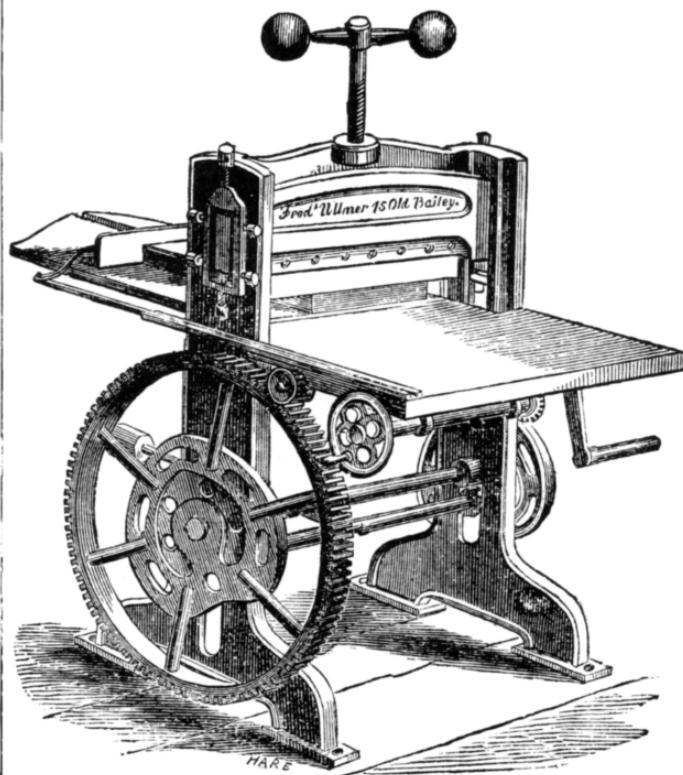
THE DIAGONAL PAPER CUTTING MACHINE

has been very extensively adopted, from its greater simplicity. In this, the lever on which the knife is fixed is raised in working to a slanting position; attached to this lever, on the right hand side, is an elbow-joint which, in the descent of the knife, gives it a diagonal or draw-cut movement, of about two inches from side to side, thus giving great ease in cutting through the paper. The lever is attached to the main shaft by right and left-handed screws fitting in sockets; by simply turning these the knife can be regulated to any pitch, thus obviating the troublesome method of having to alter the screws by which the knife is secured to the lever.

Mr. Salmon, of Manchester, has also produced a machine for cutting paper, cards, &c., with every modern improvement.

MILLED BOARD CUTTER.

Milled boards are usually marked out as before directed and cut with large shears. In large offices this machine has been introduced. It consists of a



IMPROVED
GUILLOTINE PAPER-CUTTING MACHINE.

blade working in a hinge, something like the knife of a chaff-cutting machine,—a piece of board of the size required is provided, and from this pattern the milled boards are cut into the number of pieces required.

WATTS' PAMPHLET PIERCER.

Printed sheets stitched into pamphlets, and other small works are pierced through the edge of the uncut side with three holes, and are united by a single thread, passed through the hole and tied in a knot. The instrument used for piercing the sheets, is a common awl, assisted when necessary by a mallet; and as this work is done by women, it often becomes a laborious and even painful operation.

Mr. Philip Watts was applied to by a woman occupied in pamphlet stitching, to invent a machine which should diminish the labour and expedite the work. He produced a little machine by which the sheets, being laid evenly one on another, and adjusted by means of ledges, the handle of a lever is brought down, which forces a set of needles, adjusted above, through the sheets. The motion of the needles being vertical, there is little likelihood of their being broken; but if this should happen, it is only necessary to take off the face-plate, to remove the broken needle, and to substitute a perfect one in its place.

Mr. Watts was presented with five pounds by the Society of Arts for his invention.

Another useful machine for Stationery Binding has been invented of late years, viz.

THE PAGING MACHINE

for Account Books. Of these there are several varieties. One which can be worked upon a counter, no stand being necessary, is simple in construction. Others, particularly Shaw's Improved Patent, are suitable for larger work. These machines are made to print consecutive, alternate, duplicate, or missing any number from one to ten; by which construction they are adapted to every class of numerical printing.

TOOLS, &c., USED IN FORWARDING.

No particular arrangement can be made of the articles requisite for executing the various processes in binding: we shall therefore describe them as nearly as possible in the rotation in which they are used. The first, therefore, will be

THE FOLDER,

which is a long flat piece of bone or ivory with two edges, and rounded at each extremity; used in folding the sheets of a work, and many other manipulations.

THE BEATING HAMMER.

This is shown in the engraving, figure 3, plate V., and is varied in shape according to the taste of the maker, and weighs from ten to fourteen pounds. The face is well rounded off.

THE BEATING STONE.

A solid polished body, generally of black marble, and fixed upon a firm block of wood. The stone, and manner of beating, is shown in the plate last referred to.

THE SAW.

For forming the fissures for the cords on which a book is sewn, is what is called a tenant saw, and too well known to need description.

THE KEYS.

Used for attaching the strings in sewing firmly to the foot of the sewing press. They are made of brass, and their form various, though the one seen on the engraved sketch of the sewing-press is considered the best.

THE PARING KNIFE

is what cutlers call a sword blade, being pointed at the end, and long, so as to admit of its paring the leather very thin.

THE PLOUGH KNIFE,

which is fixed to the plough by a bolt and screw as before described, is about six inches long and finely pointed, the point being the part that cuts the book, &c., as the plough is moved backward and forward. The new patent plough-knife is considered very superior.

THE COMPASSES

are large and small, the latter having a spring, and used by the gilder; the former strong in the joint, so as not to be easily moved when set to the size of the book, &c., to insure correctness in marking many volumes to the same size.

THE BODKIN.

A strong point of iron, fixed in wood, to form the holes in the boards required to lace in the bands: used also in marking the lines for cutting, &c.

THE SHEARS.

Large and small, the latter requiring no description. The large are formed of two long pieces of iron; one of which being fixed in the end of the laying press the power of the hand on the other will cause it to easily cut through milled boards, &c., required for the side covers. These shears are about four feet long.

THE SQUARE.

Two pieces of wood or iron firmly fixed at right angles to each other, one having a falling groove to fix to the side of the board, so as to cause the other to be truly marked on it.

BACKING HAMMER.

A flat round-headed hammer, similar to those

used by shoemakers. It is employed in backing the book, and every other process where the hammer is required.

KNOCKING-DOWN IRON.

A flat piece of iron with a centre-piece placed at right angles, to fix in the end of the laying press. Used for beating down the strings after lacing in the side-boards.

GRATER, OR RAKE.

An instrument armed with dents or teeth, which serves to scrape the back of the books when in the press, after boarding, to make the back hard and firm.

THE SCRAPER.

This is used by the gilder of edges to scrape the surface perfectly smooth. It is usually made of a piece of clock-spring, or blade of an elastic steel knife.

THE BURNISHER

is an agate, fixed in a long staff of wood, and used to burnish the edges of books. Sometimes a pair of dog's teeth, which bend somewhat to the shape, are used.

THE WATER TUB.

An indispensable article, which anything watertight will answer the purpose of.

BOARDS.

Boards used in bookbinding are of various kinds, viz. :

Pressing Boards, which are generally made of beech, and according to the size, of different thicknesses, all being perfectly even and smooth throughout the whole extent.

Backing Boards.—Thin pieces of wood of various lengths, thicker on the top than the bottom, and bevelled off so as to present a sharp edge to the side of the book where the grooves for the boards are to be formed. The edges are sometimes cased with iron.

Cutting Boards.—Similar to the above, but having a smooth square top to direct the knife true, and to insure the book being put even in the press.

Burnishing Boards.—In shape, nearly like the above, varying only in those being thicker at one end than the other that are employed for the head or tail of the book.

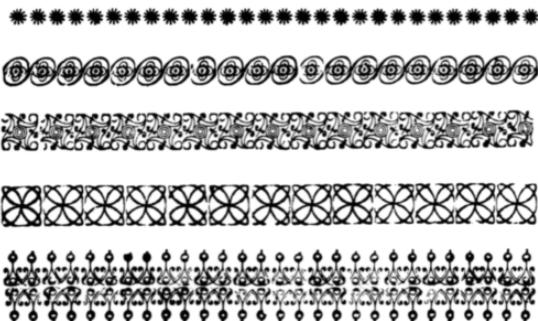
THE MARBLING TROUGH

is generally made of oak, all the joints being well put together to make it water-tight. The most useful is about thirty inches long, eighteen or twenty wide, and two or three inches deep. For the economy of size, &c., where a few books are required to be marbled, the trough may be divided into compartments, by ribs formed to fit in or remove at pleasure.

TOOLS AND CORNERS.



ROLLS AND PALLETS.



THE WINCH.

This is a cylinder of wood, mounted on an axle of iron, and used for pulling down the standing press, as shown in the engraving, plate V., figure 4.

THE SHAVING TUB,

over which is placed the cutting press, as seen in the engraving, is a frame of wood for holding the shavings, &c., from the cutting of the edges. It is so called from it being usual in early times to place the press across a tub.

BRUSHES

of various sizes, and such as are used by painters, with

VASES OR POTS

of varnished earthenware or delf, will be found requisite in many of the stages of binding. These complete the articles required in forwarding.

TOOLS, &c., REQUIRED BY THE FINISHER.

The same arrangement as for the tools of the forwarder must here also be adopted.

THE GOLD KNIFE.

This knife, used for cutting the gold, is eight or ten inches long, with a short handle, the blade being

highly tempered, and sharpened on both sides similar to a painter's palette knife.

THE GOLD CUSHION.

Formed of an oblong piece of board, covered with calf, the flesh side upwards, under which is placed several layers of flannel, or uniformly stuffed with wool.

THE TRINDEL

is simply a piece of thin lath with which the gilder passes the gold from the cushion to the edges of the book when gilding.

THE TIP.

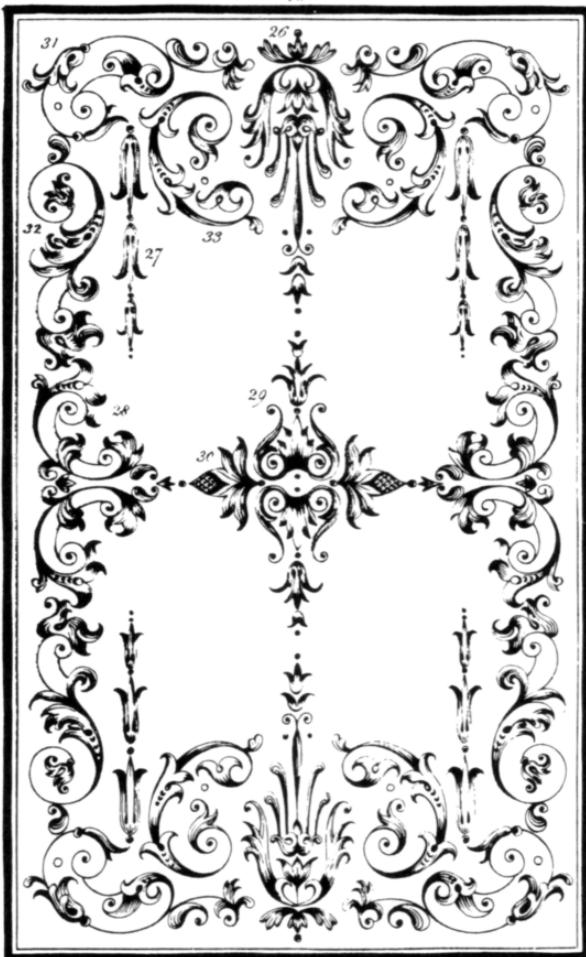
Used in a similar manner by the gilder in covering the back and sides with gold. It is made of card board, having sable between the two pieces of which it is formed.

LETTERS OR ALPHABETS

are of all sizes, cut in brass, and fixed in wooden handles, about six inches in length. There are also alphabets of

BRASS TYPE,

cut short and made to fit in a *hand chase*, whereby the entire lettering of a volume can be adjusted to the proper breadth, and fixed on the volume at one time, instead of by single letters. Where a great number of volumes of the same work are binding this effects a considerable saving of time.



TOOLS.

This name is given to such ornaments as are cut in brass and fixed in handles like letters. These are generally applied on the backs of books, and are of various descriptions.

PALLETS

are also of brass, three or four inches long, and ornamented throughout. They are fixed in handles like tools, generally the patterns of rolls, and used for gilding the bands of books.

ROLLS.

A kind of brass wheel, on the face of which is cut the figure intended to be impressed; they are of various patterns, from a single line, which is called a fillet, up to the most elaborate and classical designs. They are mounted on an iron carriage, made to receive the axle of the roll, which is firmly fixed in a long wooden handle, that rests against the shoulder when used. The second figure lying on the stove, plate VIII., shows the shape of the roll.

THE LETTERING PRESS,

represented in the opposite engraving, is the invention of Mr. Morris. The block or lettering, which is kept warm by a heater, is fixed in the slide at the bottom of the piston, and brought down by the motion of the projecting arms at the top. It is

simple and expeditious, and the cost trifling. The power of the press being limited, and only adapted to lettering pieces or small designs, it did not come into general use.

BLOCKS.

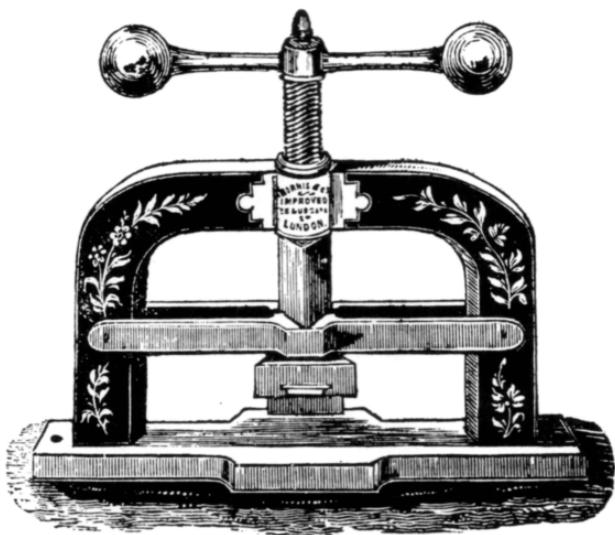
Lettering pieces with ornamental boards cut in solid brass, and executed with the arming-press, are called blocks. These are worked on the sides or backs of books, according to fancy. The great expense of providing blocks for such work was long matter of regret, and confined the use of this sort of ornament. This led to a consideration of the subject, and to the invention, by Mr. J. Morris, of Ludgate Street, London, of the

TYPOGRAPHICAL ACCELERATOR,

which is well adapted for back lettering and small ornamental side pieces. These enable the binder to proceed with his work without the delay heretofore occasioned. The design is formed with a number of separate ornaments fitting exactly into each other: thus, when the number of any design is worked off, it can be taken to pieces, and any other, from the size of a folio to a 32mo. executed. For a detailed account see Transactions of the Society of Arts, vol. 50, No. 6.

MOVEABLE BLOCKS,

as before referred to at page 95. The above method is now superseded by a further improve-



LETTERING PRESS.

ment. Instead of the brass frame or case in which the ornamental and lettering blocks were held, they are attached to the iron plate of the arming-press, thus :—A piece of cartridge paper, or milled board, is glued on the iron plate, the blocks are then arranged to form the design required, these are then glued on to the paper, by means of which the brass and iron are held firmer together. Annexed is a design for the side of a book executed on this principle. It is composed of a border and twenty four blocks, a quarter of an inch in height, viz twelve single blocks and six pairs, numbered 26 to 33. Some of these numbers it must be observed are formed of two or three separate pieces. When the design is formed, the pieces are glued on as above described. These are capable of forming a variety of sides, corners and centres; but it will be obvious that the greater the number of ornamental pieces, the greater variety of designs they will furnish.

ARMORIAL BEARINGS.

These are solid plates of brass, on which are cut the arms of such families as may wish to have their books ornamented with their heraldic insignia. Under this head, too, might be considered

ARABESQUE PLATES,

which are also in solid brass, and imprinted on the leather by means of the arming-press.

BILLETS.

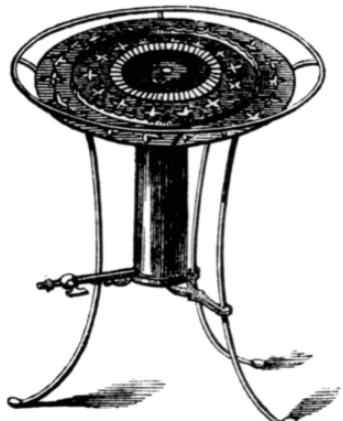
Square or inclined blocks of wood used for placing the book on, or between, during the operation of gilding.

THE POLISHER

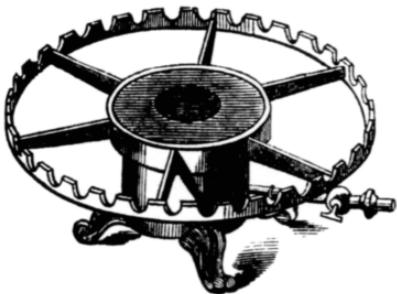
is a bar of iron an inch in diameter, and a foot long, bent a little forward at bottom. At the end a transverse bar of iron, about three inches round and four long, is fixed, having a highly polished surface on the circular part intended to act on the book. The shape is shown in the near figure on the stove. This iron is fixed in a wooden handle like the rolls. Another polisher for the back and bands is used; instead of being round at bottom, it is brought out to nearly a fine edge so as to admit of its polishing close to the bands on the back.

THE STOVE.

The stove of the Finisher varies much. In large offices in London, an open pan, with niches for each letter round the edge, is most generally used. In smaller they differ, are of varied shapes, some being open, and some having small apertures round the sides. Considering the general utility, we give an engraving of one which we deem will be found to answer every purpose of the gilder, being the most commodious and most perfect we know, and one which can be made, from the description we shall



1



2

GAS FINISHING STOVES.

give, in any place at a small expense. See figure 4, plate VIII.

The framework consists of the stove, the cap which receives the smoke, &c., which escapes from the charcoal, and the pipe or tunnel which conducts it above. Within is placed a grill of iron, on which the charcoal rests. Under this is a large opening for the introduction of air necessary for combustion. This opening may be shut by the door seen traversing the bars of the part in front. On this side is a drawer, which serves to receive the ashes of the charcoal. Above the fire-place are two large openings, which may be entirely closed, or the contrary, by a door on each side (which move on vertical hinges), according as the heat is wished to be increased or diminished. One of these doors is shown open. All this part of the stove is constructed of thin plate iron. The base of the part in front is also of plate iron, and all the rest constructed of small iron rods, as shown in the engraving.

In large establishments, and where gas is attainable, a more ready and economical method for heating will be found by the adoption of Gas Stoves, two of which are shown in the opposite engraving, and may be procured of Mr. Ullmer, 15, Old Bailey, London.

GRAINING PLATES.

These are cut in copper and brass, and are the size of the forms of different books. For the cross-grain, fine wire is tightly crossed from side to side, at

regular distances, and the whole run over evenly with solder.

It may be further remarked, that the finisher will also require a gold-rag, some fine cotton-wool, camel's hair pencils, sponges, and brushes, but these will need no description.

We have now treated of every thing connected with this part of our subject, and brought to a close our endeavours to lay before the trade minute particulars of every manipulation in the various branches of the Art of Bookbinding, as well as a description of the Tools required for their proper execution. It remains only to add such matters as could not be introduced therein, and which will be found in the following Appendix.

APPENDIX.
—

ON BLEACHING, &c.

It is necessary that the binder should be conversant with the best methods for taking out any stains that may from accident, have been communicated to paper, and also for giving to it a better colour. We shall, therefore, lay down the most simple but approved methods for rendering the material as clear as possible.

There are two ways of whitening paper, viz. by submitting it to the action of vapour, and to that of acids diluted in water. We shall place these, as well as the other receipts, under their proper heads, describing the manipulations peculiar to each method.

ON BLEACHING PAPER GROWN YELLOW BY AGE, &c.

The best proceeding known is the one given by M. Chaptal, and long used by the trade. It is commenced by cutting the bands and separating the sheets, which should be placed in cases formed in a leaden tub, with very thin slips of wood, so that the sheets rest on a plate separated one from the other by intervals scarcely sensible; then pour into the tub

oxymuriatic acid or *chlorine*, taking care that it falls upon the sides so that the leaves are not deranged by the motion. When the workman judges by the whiteness of the paper that it has been sufficiently acted upon, the acid is drawn off by a little cock placed at the bottom of the tub, and its place supplied with fresh clear water several times, to take off, and deprive it of the smell of the acid. The leaves are placed to dry, afterwards pressed, and then re-bound.

The leaves might be placed vertically in the tub, which position presents some advantages, from the sheets not being so liable to tear. M. Chaptal constructed a frame of wood, adjusted to the size of the paper. This frame contained very thin slips of wood, with intervals between them. In each of these intervals two leaves were placed, held to their positions by small wooden wedges forced between them, so as to press them against the sides of the slips. This proceeding is more preferable from the frame being easily raised and plunged into fresh water.

By these means not only are the leaves cleaned, but the paper receives a degree of whiteness it never before possessed. The acid also removes stains of ink, which are often found to disfigure a book.

Another plan is to steep the leaves in a caustic solution of soda prepared as follows:—With a certain weight of the *subcarbonate of soda* or *potash*, mix half the quantity of *quick-lime*; then add soft water, and boil. The liquor, when cold, is the solution of *caustic alkali*. As the causticity of the alkalies

depends on their freedom from carbonic acid, which the quick-lime absorbs, it is necessary that the solution should be kept from exposure to the atmosphere, which restores to it the carbonic acid, and thereby destroys its caustic properties. When perfectly bleached, arrange the sheets on lines to dry, or place them between cloths, in the same manner as paper-makers dispose their sheets of paper when delivered from the form. When quite dry, press them between glazed boards, and the texture of the paper will be the same as at first.

A solution of *chlorine of lime* has been found to have a good effect, restoring in a few minutes engravings, &c., very much stained with smoke and damp.

Some consider submitting the paper to the action of vapour preferable to steeping, as above directed. *Sulphuric acid gas* removes very readily the yellow colour which age gives to paper. The use of this will require some precaution ; and to operate more effectually, it is proper to be provided with a large chest, perfectly air tight, so as to prevent the escape of the gas. In this chest, a number of small cords must be disposed, very near each other, and on which the paper is placed. On each side is formed an opening, which is glazed, and well fastened round, so that the progress of the operation may be observed, and the paper withdrawn the instant it is sufficiently bleached. The ignition of the sulphur should not be made in the chest, as a risk is hazarded of blacking

the paper, but in a little furnace placed on the side without, and the sulphuric vapour directed by a pipe into it. The sulphur is then put by degrees upon an iron plate placed over the fire, so as to keep up a supply of vapour till the operation is completed.

The same precautions will be necessary in using *chlorine*, or *oxymuriatic acid*, in a state of gas. After disposing the paper on the cords, place in a cup a spoonful of *muriatic acid*, (spirits of salts), and put round it another of *oxyde of manganese* (red lead); then place this cup in a vessel filled with hot water, and set it on the fire; it thus gives out a large portion of gas, by which the chamber is filled, as before directed.

ON TAKING OUT STAINS OF INK, OIL, AND GREASE.

Oxymuriatic acid, or *chlorine*, removes perfectly stains of ink; and should the paper require bleaching, the operation will answer both ends at the same time; but as it more frequently happens that the stains are the only blemish necessary to remove, the proceedings are given for taking them out without pulling to pieces the volume.

Nearly all the acids remove spots of ink from paper, but it is important to use such as attack its texture the least. *Spirits of salts*, diluted in five or six times the quantity of water, may be applied with success upon the spot, and after a minute or two washing it off with clear water. A solution of *oxalic acid*, *citric acid*, or *tartaric acid* is attended with

the least risk, and may be applied upon the paper and plates without fear of damage. These acids taking out writing ink, and not touching the printing, can be used for restoring books where the margins have been written upon, without attacking the text.

When the paper is disfigured with stains of iron, it may be perfectly restored by applying a solution of *sulphuret of potash*, and afterwards one of *oxalic acid*. The sulphuret extracts from the iron part of its oxygen, and renders it soluble in the diluted acids.

A simple, but at the same time a very effectual method of raising spots of grease, wax, oil, or any other fat substance, is by washing the part with *ether*, and by placing it between white blotting paper. Then with a hot iron press above the parts stained, and the defect will be speedily removed. In many cases, where the stains are not bad, rectified *spirits of wine* will be found to answer the purpose.

The most expeditious, and by some binders considered the best, mode of removing grease from paper is, to scrape fine pipe clay on both sides of the stain, and apply a hot iron above, taking especial care that it is not too hot, whereby the paper might be scorched. The same process will remove grease from coloured calf, and if the spot should even be on the under side of the leather it may be thus cleanly drawn through. For dirty-fingered workmen this must be invaluable.

Imison, in his *Elements of Science*, gives the fol-

lowing receipt for taking out spots of grease, and which has been very generally adopted. "After having gently warmed the paper that is stained with grease, take out as much as possible by means of blotting paper, then dip a small brush in the essential oil of turpentine, heated almost to ebullition, and draw it gently over both sides of the paper, which must be carefully kept warm. This operation must be repeated as many times as the quantity of the fat imbibed by the paper, or the thickness of the paper may render necessary. When the greasy substance is entirely removed, recourse may be had to the following method to restore the paper to its former whiteness, which is not completely restored by the first process. Dip another brush in highly rectified spirit of wine, and draw it in like manner over the place which was stained, and particularly round the edges, to remove the border that would still present a stain. By employing these means with proper caution, the spot will totally disappear, the paper will resume its original whiteness, and if the process has been employed on a part written with common ink, or printed with printer's ink, it will experience no alteration."

ON GIVING CONSISTENCE TO BAD PAPER.

The method used in Germany was first communicated from Strasburg by M. de Regemorte, who had made many researches on the subject, and will be found the best. This plan not only gives to paper

an additional firmness, but a better colour. It consists of making a strong size, in a proportion of one ounce of isinglass, dissolved in a quart of water, and boiled over the water, to which afterwards add a quarter of a pound of alum, and when dissolved filter through a sieve. The paper must be passed through the size, at a heat wherein the hand may be held, then placed on lines to dry gradually, not exposed to the sun in summer, or a room too warm in winter, and afterwards pressed.

HOT AND COLD PRESSING.

The presser should be provided with a considerable number of glazed boards, &c. This art, which appears very simple, requires a good knowledge of the qualities of different papers, each of these qualities demanding the precautions which it is impossible to describe, and for which general rules only could be given. A little practice will render this soon easy. The proceedings are so well known, that they need no description.

ON THE SCENT OF RUSSIA.

The peculiar scent of russia leather, so esteemed as a cover for books, is given with the *empyreumatic oil of the birch*. The bark of this tree is also used in northern Europe in tanning. Many researches have been made by distinguished chymists, but at present no method that can be decided effectual in its results has been made known. It remains, how-

ever, for the scientific to consider how far the oil above-mentioned may be employed to cause other leather to give out the peculiar odour of Russia.

ON PERFUMING BOOKS.

Musk, with one or two drops of *oil of neroli*, sponged on each side of the leaves and hung up to dry, will give them a powerful odour. A more simple proceeding is to put a phial containing this mixture into the bookcase, or place on various parts of the shelves pieces of cotton wool, well impregnated with *oil of birch* or *cedar*.

ON DESTROYING WORMS.

There is a small insect, *Aglossa pinguinalis*, that deposits its larvæ in books in the autumn, especially in the leaves nearest the cover. These gradually produce a kind of mites, doing the binding no little injury. But the little wood-boring beetles, *anobium pertinax* and *striatum*, are the most destructive. M. Peignot mentions an instance where, in a public library but little frequented, *twenty-seven* folio volumes were perforated in a straight line by the same insect, in such a manner that, on passing a cord through the perfectly round hole made by it, these twenty-seven volumes could be raised at once. The seat of the mischief appears to lie in the binding, and the best preventive against their attacks is mineral salts, to which all insects have an aversion. *Alum* and *vitriol* are proper for this purpose, and

it would be advisable to mix a portion with the paste used for covering the books. M. Prediger, among other instructions to German bookbinders, advises them to make their paste of starch instead of flour. He also recommends them to slightly powder the books, the covers, and even the shelves on which they stand, with a mixture of powdered alum and fine pepper, and is of opinion that in the months of March, July, and September, books should be rubbed with a piece of woollen cloth, steeped in a solution of powdered alum, and dried.

SHELL GOLD.

Grind up gold leaf with honey, in a mortar; then wash away the honey with water, and mix the gold powder with gum-water. This may be applied to any substance with a camel's hair pencil, in the same way as any colour.

PASTE.

Flour paste for cementing is formed principally of wheaten flour boiled in water till it becomes of a glutinous or viscid consistence. It may be prepared of these ingredients simply for common purposes, but the paste proper for bookbinding should have mixed with the flour a sixth or eighth part of its weight of powdered alum, and if it is wanted still more tenacious, gum arabic, or any kind of size, may be added.

TECHNICAL TERMS
USED IN THE
ART OF BOOKBINDING.

Arms. Plates on which are engraved, in relief, armorial bearings, usually gilt on the sides of books belonging to the libraries of the nobility.

Asterisk. A sign used by the printers, at the bottom of the front page of the duplicate leaves printed to supply the place of those cancelled.

Bands. The strings whereon the sheets of a volume are sewn, which are either let in by sewing the back, or project from the back. This term also applies to pieces of leather glued on the back previous to covering the book, and used merely for ornament. The space between two of these is called *between bands*.

Bands. Name given to bindings simply covered with leather in the tanned state. Thus we say, *in sheep bands*.

Bazil. Sheep skin tanned, used for common bindings.

Bead. The little knot of the headband.

Beating. A section of sheets of a work taken at one time, and beat with the hammer upon the stone.

Bleed. A work is said to bleed, if cut into the print.

Blind-Tooled. Where the book is ornamented with the gilding-tools, but without gold.

Boards. The name given to the pieces of wood used in the various processes of pressing, backing, cutting, and burnishing of the work ; also, the side covers of the book.

Boards, in. When the edges of a book are cut after the boards have been laced in. *Out of boards*, when cut first. Where the book is covered with paper or cloth, it is also called *in boards*.

Bosses. The plates of brass attached to the sides of large volumes, for their greater preservation.

Cancels. Leaves containing errors, which are to be cut out and replaced with others printed correctly ; and generally given with the last sheet of a book.

Case Work. Where the covers are prepared before placing on the volume.

Catch-Word. A word met with in early printed books at the bottom of the last page of each sheet, which word is the first of the page which follows in the next.

Chain-Stitch. The stitch which the sewer makes at the head and tail of the volume previous to commencing another course.

Collating. This operation is common to the gatherer, folder, and binder. It is the examining of the sheets, to see that the signatures properly follow, to prevent any transposition whereby the work would be rendered imperfect.

Corners. The triangular brass tools used as ornaments on the corners of the sides of books. The pieces of brass fixed on stationery bindings ; also the pieces of leather pasted on the corners of half-bound books.

Cropping. The cutting down of a book near the print.

Double Book. When a book is printed in half sheets, it is called a double book.

Drawing in. The operation of fastening the boards to the back of the volume, with the bands on which it is sewn.

End Papers. The blank leaves placed at the beginning and end of a volume.

Extra ; as Calf-extra. Is a term applied to the style of binding, when the book is well forwarded, lined with good marble

paper, has silk headbands, and gilt with a narrow roll round the sides and inside the squares.

Finisher. The workman who executes the colouring, gilding, and other ornamental operations of binding.

Filletted. Is when the bands of a volume are marked with a single gilt line only.

Folder. The party who folds the book according to the pages, previous to its being bound or boarded. This department in large towns is generally done by females.

Fore-edge. The front edge of the book.

Forcarder. The workman who performs all the operations of binding, up to the colouring.

Foot-line. The line at the bottom of the first page of each sheet, under which is placed the signature.

Gatherer. The name given to the workman who classes the printed sheets of a volume according to the signatures.

Gathering. A portion of ten or twelve sheets of a volume, as made up previous to folding; thus, a work is said to consist of two, three, or more gatherings.

Gilder. In London and great towns, the workman who gilds the edges of books; also applied to the one who gilds the backs and sides.

Gilt. A book bound firm and strong, having plain end-papers and gilt back.

Glaire. Name given to the whites of eggs used in the process of gilding.

Grooves. The projections formed on the sides of the books in backing, to admit of the boards laying even with the back when laced in.

Guards. Shreds of strong paper interspersed and sewn to the backs of books, intended for the insertion of prints, &c., to prevent the book being uneven when filled. Also the pieces projecting over the end-papers.

Gutter. The round front edge of a volume, formed by flattening the circular back previous to cutting.

Half-bound. When the back and corners of a book only are covered with leather, and the sides with coloured or marble paper.

Half-extra. Books forwarded carefully, and lined with common marble paper, having silk headbands, and narrow rolled round the sides with gold, but plain inside.

Head. The top of the volume.

Headband. The silk or cotton ornament placed at the top and bottom of the back.

Headline. The line immediately under the running-title on the pages of a book.

Inset. The pages cut off in folding, and placed in the middle of the folded sheet.

Justification. The observance that the pages of works, bound in one volume, agree in length and breadth, so as to insure their not being cut into the print.

Kettle stitch. A corruption of chain-stitch.

Lettered. Volumes simply filleted on the back, and the title lettered.

Lines. A book is said to be in *morocco lines*, when the only ornament is a plain fillet on the bands and round the sides.

Lining the Boards. Pasting paper on the boards before fixing them to the volume, to give them more firmness.

Marbler. The workman who marbles the edges of books, &c.

Nose. In glueing up a volume, if the workman has not been careful to make all the sheets occupy a right line at the head, it will present a point either at the beginning or end which point is called a *nose*.

Overcasting. An operation in sewing, where the work consists of single leaves or plates, the thread being brought over the back and the needle pierced through the paper near the band.

Pallet. Name given to the tools used in gilding the bands.

Paring. Bringing down with the knife the edges of leather, &c., to avoid the projections they would otherwise make.

Patch. The piece of leather, placed over the defects sometimes found in common substances.

Points. Terms of gathering and folding. They are two holes made in the sheets in the process of printing, to insure, in turning, what is called good register. These holes serve as a guide in certain folds which are made by the folder.

Quire. The same as a gathering.

Register, or Registrum Chartarum. A list of signatures and first words of sheets, attached to the end of early printed works for the use of the binder, but now long disused.

Registers. Ribbons fastened under the headband, left hanging at the foot, to denote the place where the reader may have left off.

Rolls. The cylindrical ornaments used for gilding.

Running Title. The title of the work placed at the head of each page, above the text.

Section. See Beating.

Set-off. When the ink, not being properly dry, is transferred in beating and pressing to the page opposite.

Setting the Headband. Is to form the leather at the head and tail of the book into a cap, to cover the headband.

Sewer. The person who sews the sheets of a book together on the sewing press. Like folding, this is an operation generally performed by females.

Signature. The capital letters or figures under the footline of the first page of each sheet, to indicate the order in which they should be placed.

Size. Substances composed of gums, vellum, &c., used by the marbler and gilder.

Squares. That portion of the boards of a volume which projects over the edges.

Start. When any of the leaves, after binding, spring from the back and project from the general line of the edge, they are said to start.

Stitcher. The party who sews together the sheets of a pamphlet or other work, which is covered with paper only.

Super-extra. A book beat and forwarded in the best manner, having superior coloured end-papers, double head-bands, and broad registers; rolled inside and double rolled outside with narrow rolls, or one broad roll.

Table. The smooth side of the laying press.

Tail. The bottom of the book.

Tools. The name given to the brass ornaments used in gilding.

Turning up. An operation of flattening the back previous to putting the book in the press to cut the fore-edge, whereby a groove is formed on the edge, when the back resumes its circular form.

Tying up. The tying of a volume after covering between two boards, with strong cord, to mark the position of the bands, and to cause the leather to adhere to the sides of them.

Warp. A process after the volume is finished, to give the boards a convex form, which tends to keep close the fore-edge of the book.

Waste. The overplus sheets of a work after all the copies have been made up by the gatherer, and from which the binder is supplied with any imperfections.

Wrinkle. The uneven places in a book formed from being badly beaten or pressed.

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"ECONOMIC" CUTTING MACHINE**

FOR PAPER. CARDS, &c.,
WITH EVERY MODERN IMPROVEMENT,

Including the Continuous Movement; the Diagonal Motion of the Knife; Easy Method of Removing the Lead, and Adjusting the Knife, &c.; it also embraces Wilson's Regulation of the Knife, for different kinds of Paper.

26-inch (to cut Royal), £40 | 32-inch (to cut Double Crown), £50.

Each Machine Guaranteed, and will be supplied with Two Knives.

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With the Latest Improvements.

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Imperial Iron Standing Press, with 3½-inch screw		32 0 0
Ditto ditto ditto 3½ "		28 10 0
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GREGORY'S PATENT COMPOUND-ACTION PRESS.

*This Press is also supplied with Patent Steam Plates for Hot Pressing,
which is a decided improvement upon the old system.*

*It can also be had with Perforated Boxes, for Dressing Liquids of any kind; it is
recommended to Paper Makers for Pressing Half Stuff.*

It has long been admitted that a really good Press, combining rapidity of action with increased power, is a desideratum. The deficiency of the old Single Screw Press, and the liability of Hydraulic Presses to get out of working order, are facts too well known to need any comment.

The Patentee respectfully solicits the attention of Manufacturers, Printers, and others, to the great advantages which his Compound-action Press offers over all others.

They are suitable for Manufacturers, Letterpress Printers, and Bookbinders; also for Pressing Woollen Goods, Tobacco, Hay, Cotton, or other material, where a pressure from 40 to 100 tons is required.

SIZES AND PRICES:—

27 in. × 19 in., £28; 32 in. × 22 in., £30; 36 in. × 30 in., £42

OTHER SIZES TO ORDER.

HATTON'S PATENT NIPPING PRESS.

The object of this Press is to supply a want that has long been experienced by Bookbinders, Printers, Stationers, Pattern Card Makers, and others, namely, a portable Pressing or Nipping Machine, with expeditious movement, convenient arrangement, and effective execution.

The above Press is respectfully submitted to the notice of the trade, with the full confidence that it secures these desirable objects; and the very flattering notice it has already received warrants an expectation of its general adoption.

The great utility of the Machine may be gathered from the fact that, by a momentary arrangement it can be adapted alike to the pressing of a single sheet of paper to a bulk some three feet in height, or anything intermediate, without the use of blocks or any of the old forms of packing. It is, moreover, very rapid in motion, and capable of applying great pressure without the introduction of further leverage than the standing Machine supplies. There are other minor (but practical) advantages, which only an inspection or trial of the Machine can well elucidate.

Sizes and Prices—15 in. × 20 in., £12 12s.; 18×24 in., £15 15s.

SALMON'S LEVER PAGING or NUMBERING MACHINE.

No 1 is a HAND MACHINE, on wood stand, polished, with mahogany rising table. Works *consecutively, alternately, and repeats*: with each is sent a set of Clicks, Roller Mould, Hand Roller, and Iron Inking Table to screw to frame; is suitable for Paging Books or Numbering Checks, having a slot in back to pass the sheets of paper.

Price £15.

No. 2 is a HAND MACHINE, without stand, with rising and falling table. Price £12 12s.

Extra Sets of Wheels for the above per set, £5.
Five Wheels are a Set: Extra Wheels, each 15s.

SALMON'S TREADLE PAGING or NUMBERING MACHINE.

No. 3 is an Upright Paging Machine, with iron stand, mahogany rising table, inking apparatus and TAPE MOVEMENT; works *consecutively, alternately, and repeats twice or three times*; roller mould, &c., complete. The best Single Treadle Machine that can be obtained.

Price £28.

Extra Sets of Wheels for the above £8.
Five Wheels are a Set: extra Wheels, each 20s.

SALMON'S IMPROVED TREADLE PERFORATING MACHINE.

ROUND HOLE.

26 inches, with four sections	£18	0	0
20 , " with three section : : :	12	12	0
20 , " without sections	10	10	0

LATHAM'S PATENT ROTARY ROUND HOLE PERFORATING MACHINES

*For Perforating Tickets, Stamps, Check Books, Delivery Books, &c. &c.,
and every description of work requiring severing, with Extraordinary
RAPIDITY and Dispatch.*

The want of a quick and neat method of Perforating has long been felt, and various machines have been introduced, but with very unsatisfactory results to the purchasers and to the public. The round hole Perforation as in postage stamps has met with the most general approval, as being the neatest, and at the same time the most certain to sever; but the time occupied to effect this is very considerable, particularly where several lines of Perforation are required, or in ticket books of several tickets deep, where the lines of Perforation have to be stopped,—most of the machines for this class of work requiring the removal of some of the punches. To meet this two-fold want the Patentees have retained the neatness of the round hole, combined with IMMENSE SPEED in effecting it; this machine requiring no alteration, and the speed being exceedingly rapid.

In No. 2 machine the wheels for effecting the perforation are placed upon triangular shafts, and can be moved and adjusted to any distance between 2 feet 6 inches, which is the length of the shafts. Each wheel is $\frac{7}{8}$ inches in diameter, round which 300 steel punches, are placed, these work into 300 corresponding steel holes contained in the lower wheel. The paper or card is fed to a guide, as in a ruling machine, the punches immediately grip it and carry it between the wheels, and the perforation is effected without the slightest effort, the paper being cut clean out, and the small particles passing through the lower wheel fall under the machine. The sheets are taken off the punches by guides, and fall upon the table on the opposite side of the machine. The Perforation can be stopped at any distance without any alteration by simply reversing the handle. It will be seen therefore that any number of lines of perforation can be effected at one time, according to the number of perforating wheels placed upon the shafts, also that any wheels that are not wanted can be thrown out of gear. The sheets in passing through keep perfectly straight, and can be depended upon for working at press same as ruled sheets of paper in book headings. The machine is quite easy to turn, and can be worked by a boy or girl; and the motion being rotary and continuous the lines of Perforation can be made either long or short at the option of the operator, and the sheets can be perforated as fast as a person can feed the machine. In books requiring the perforation to be stopped, as in Ticket Books, Delivery Books, and the like, with a machine of four wheels, a Ticket book of 800 leaves, and 5 tickets deep, requiring a line of perforation up the centre with 4 branches of perforation from it, can be done in 20 minutes! Of course if there were more lines of perforation it would only occupy the same time, but would require more perforating wheels. The machine is not liable to get out of repair, the punches are quite flat on the face and are made from the best of steel, and the whole machine well and accurately fitted up. It can be driven by steam power if required.

In No. 1 machine the perforating wheels are fast upon the shafts and cannot be taken out of gear, which is not at all necessary in this machine. The machine is quite self-contained and cannot get out of order when used by the most careless person, for whether standing straight or crooked, or in whatever position it may be placed it will do its work equally the same. It is also open at the side and will take a sheet of paper of almost unlimited breadth as well as unlimited length. In the diameter of the wheels, punches, guides, &c., it is same as the larger machine, and will fully meet the requirements of a large number of printers. It is beautifully polished and would be an ornament to a shop.

W. H. & F. C. W. LATHAM, PATENTEES.

No. 1 Machine with One Set of Wheels, Polished, and Mahogany Table, elegantly got up, suitable for a front shop, £15. Same Machine, unpolished, £12. 12s.

No. 2, with One Set of Wheels complete, allowing the Wheels to be moved to any part of the Shafts, £25; 2 Wheels £40; 3 do. £50; 4 do. £60; 5 do. £70; 6 do. £80; 7 do. £90; 8 do. £100; 9 do. £110; 10 do. £120; 11 do. £130; 12 do. £140.

JAMES SALMON, Sole Agent.

SALMON'S 'ECLIPSE'
 UNIVERSAL JOB
PRINTING MACHINE

Is the most Complete and Perfect of its kind in the Market.

JAMES SALMON begs to say, from his long practical knowledge of the requirements of the Trade, he has introduced the above-named **PERFECT LITTLE MACHINE**, in which every approved modern appliance has been adopted. It can be sent out completely fitted when required.

Demy Folio, FORTY GUINEAS; Royal Folio, FIFTY GUINEAS;
 Demy, £85; if with Reciprocating Inking Apparatus,
 for Extra Fine Work, £7 10s. and £10 10s. extra.

The Trade are respectfully invited to inspect the above.

S. BREMNER'S IMPROVED
 DOUBLE PATENT
"BELLE SAUVAGE"
PRINTING MACHINE,

(Protected by Her Majesty's Royal Great Seal Letters Patent.)

With New Design and Registered Framework, as supplied to Her Majesty's Government, is universally acknowledged to be the simplest Single-Cylinder Newspaper, Book, Rule, Color, and General Jobbing Machine of the day.

ADAPTED TO FOOT, HAND, OR STEAM POWER.

CONISBEE'S IMPROVED MAIN'S PATENT
"ECONOMIC"
PRINTING MACHINE,

(Protected by Her Majesty's Royal Great Seal Letters Patent.)

Suitable for Printing Newspapers, Book-work, Broadsides, and General Jobbing, has attained the largest sale, and given the most satisfaction of any Single-Cylinder Gripper Printing Machine yet invented.

ADAPTED TO HAND OR STEAM POWER.

Double Platen and Scandinavian Single Platen

PRINTING MACHINES.

ANGLO-FRENCH

PERFECTING MACHINES,

With and without SET-OFF SHEET APPARATUS.

Hoe's Patent "American"

CARD, SINGLE CYLINDER, AND TWO-FEEDER MACHINES.

SALMON'S

PATENT RAILWAY TICKET PRINTING MACHINES,

Which Prints, Numbers consecutively, and Perforates Tickets, at the rate of 12,000 per hour. £105.

ALBION AND COLUMBIAN PRINTING PRESSES.

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BOOK ROLLING MACHINES, with great power, from £25.

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Double Geared, and Fly Wheel,

12×18, £5 5s.; 15×21, £7 7s.; 18×24, £9 9s.

EMBOSSING PRESSES, FOR STATIONERS.

Lever Embossing Presses. Double Eject Presses.

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BOOKBINDERS' RULING MACHINES, from £7 7s.

LETTER COPYING PRESSES, AT REDUCED PRICES.—GUARANTEED.

STEAM ENGINE & BOILER COMBINED, COMPLETELY FITTED.

2-Horse £65.; 3-Horse £85.; 4-Horse £105.

*“Memoir of
John Hannett”*

W. Salt Brassington



A HISTORY OF
THE
ART OF BOOKBINDING,

WITH SOME ACCOUNT OF
THE BOOKS OF THE ANCIENTS.

EDITED BY
W. SALT BRASSINGTON, F.S.A.,
Author of "Historic Bindings in the Bodleian Library," &c.

Illustrated with Numerous Engravings, and photographic Reproductions of
Ancient Bindings in Colour and Monotints.

LONDON
ELLIOT STOCK, 62, PATERNOSTER ROW.
1894.

P R E F A C E.



"HISTORY OF THE ART OF BOOKBINDING" is based upon a useful and now scarce little book entitled "An Inquiry into the Nature and Form of the Books of the Ancients," by John Hannett. At Mr. Hannett's request I undertook to revise, rearrange, and rewrite his treatise, so that this history is practically a new one. To me it is a matter of deep regret that Mr. Hannett did not live to see the work completed.

Following the example so well set by Mr. Hannett, as far as possible theories have been avoided, and in stating facts preference has been given to the actual words of the authors quoted, references being placed at the foot of the page.

I desire to thank my numerous correspondents for the help they have generously given me.

My thanks are especially due to E. Maunde Thompson, Esq., D.C.L., LL.D., to Richard Garnett, Esq., LL.D., to E. J. L. Scott, Esq., M.A., to Augustus Wollaston Franks, Esq., C.B., F.S.A., and to W. Y. Fletcher, Esq., F.S.A., for facilities given me for the examination of bindings in the British Museum; to W. B. Nicholson, Esq., M.A., for the same privilege at the Bodleian Library; to the Council of the Society of Antiquaries, for permission to copy the cover of the Winton Domesday Book; also to John Cotton, Esq., F.R.I.B.A., H. M. Cundall, Esq., F.S.A., to the Rev. George Jinks, to E. M. Borrajo, Esq., and to C. J. Wertheimer, Esq.

To H. S. Richardson, Esq., and Cedric Chivers, Esq., I am indebted for the loan of two engravings.

W. SALT BRASSINGTON.

MOSELEY, BIRMINGHAM, 1893.

MEMOIR OF JOHN HANNETT.



JOHN HANNETT, author, printer, bookbinder, antiquary, was born on October 25th, 1803, at Sleaford, in Lincolnshire, where his father, John Hannett senior, formerly Fleet surgeon in the Royal Navy, practised as a surgeon until his death, February 27th, 1809, aged forty-two. His widow, whose maiden name was Sarah Andrews, (hence her son's well-known pen-name,) afterwards married Mr. Joseph Roorts, and died June 18th, 1848, aged seventy years.

Upon leaving school the subject of this memoir was apprenticed to J. Creasey, printer and bookbinder, Market Place, Sleaford. In the twenty-fourth year of his age he went to London, where the next ten years of his life were spent in the famous publishing house of Simpkin, Marshall & Co. It was during those years of early manhood that John Hannett employed the leisure after business hours in collecting materials for his first books; it was then that he became acquainted with Dr. Dibdin, the Rev. T. H. Horne, Sir S. R. Meyrick, and other noted bibliographers and collectors of the old school, who generously assisted him in his labour of love.

Hannett's first book, a practical treatise on the art and craft of bookbinding, of which he himself was a master, and therefore could speak with authority, was entitled: "Bibliopegia, or the Art of Bookbinding in all its Branches." The book appeared in small duodecimo form, pp. 212, 10 plates, and addenda pp. x. It was published in the year 1835, under the pen-name of John Andrews Arnett.

The next book was of a more ambitious nature. Believing that an intelligent workman should know something of the history of the art he practises, John Hannett studied the best bibliographies, and examined such specimens of ancient binding as were then accessible, with the result that in 1837 he published:—

"An Inquiry into the Nature and Form of the Books of the Ancients, with a History of Bookbinding from the Times of the Greeks and Romans to the Present Day."
Pp. 212.

This book was well received, and, in combination with "Bibliopegia," it passed through six editions between 1837 and 1865.

In the same year (1837) and under the same pen-name another book appeared :—

"The Bookbinders' School of Design as applied to the Combination of Tools in the Art of Finishing." Pp. 14, 8 plates engraved by Joseph Morris. 4to.

"Bibliopegia" was translated into German, and published at Stuttgart in 16mo form in 1837.

Incensed work had overtaxed the young man's strength, and reluctantly he left London in the year of the Queen's accession, in order to commence business on his own account as a printer and bookbinder at Market Rasen, in his native county, where he remained seven years, and then removed to Henley-in-Arden. On November 10th, 1844, John Hannett commenced business as a printer, bookbinder, general stationer, and postmaster, in the High Street of the quiet old Warwickshire town, and after twenty-five years of ceaseless industry retired on a comfortable fortune to end his days in a picturesque old house in Henley Street.

From the post office at Henley-in-Arden, in 1848, Mr. Hannett issued the fourth edition of "Bibliopegia," printed by himself, though bearing the name of Simpkin, Marshall & Co., London. Another edition quickly followed ; and the sixth and last edition, with a new title-page, preface, and index, appeared in 1865.

At Henley John Hannett found himself in the midst of a famous forest, sacred with memories of Shakespeare, the scene of many historical events and the home of many romantic legends. With true antiquarian instinct our author turned to the Forest of Arden, and found a subject for another book :—

"The Forest of Arden, its Towns, Villages, and Hamlets: a Topographical and Historical Account of the District between the Avon, Henley-in-Arden and Hampton-in-Arden." Pp. 320, 57 cuts by E. Whymper, map. 1863.

The merits of this interesting record of local history won for it liberal patronage, and the author had only a short time before his death completed a revised edition of the book. Mr. Hannett was a constant contributor to the *Stratford-on-Avon Herald*; and in 1886, when eighty-three years of age, he collected and published a series of letters written for that paper :—

"Notes Illustrative of the Early Corporations of Old English Towns," pp. 14: a curious and interesting work, having reference especially to Henley-in-Arden and its local life and charities.

After he retired from business Mr. Hannett devoted the remainder of his long and useful life to the service of the little town in which he had made his home.

In 1873 Mr. Darwin Galton, the Lord of the Manor, appointed Mr. Hannett High Bailiff of Henley. In this capacity the worthy old man led all movements for the good of the small community over which he presided. He was particularly the

friend of the very old and very young. On each succeeding birthday anniversary the High Bailiff gathered round him all the poor people of about his own age, entertaining these old friends in good old English style, and making a present to each. In the summer he frequently entertained merry parties of boys and girls in the old orchard behind his residence. When he met the village children in the street he had always a kindly greeting for them, and he relieved the sick poor of the town so unostentatiously that few were aware of the extent of his benevolence.

There is yet another field in which this kindly old man distinguished himself : he believed in old English sports, and for many years acted as secretary to the Henley Steeplechases. He was also secretary and treasurer to the local charities, and could make a speech or deliver an interesting lecture to his fellow-townsman when called upon.

In April 1893, being then in his ninetieth year, John Hannett passed peacefully away. In his will was found a card on which he had written the following lines :—

"But late I saw him, still the same,
Though years lay on him, mellow, ripe, and kind ;
Age had but hardened, not subdued,
Had but matured, not dimm'd, his vigorous mind."

Amid tokens of sincere regret the remains of this good man were laid to rest in the churchyard of the little Norman church of Beaudesert, in the Forest of Arden. The simple record of his useful life is the best eulogy that can be written.

W. S. B.

