and of (2) whole block-books, sometimes consisting of half picture and half text, or wholly of text, or altogether of picture.@@1 It is, however, certain that about 1400 xylo­graphy was known all over Germany, Flanders, and Holland.

In these blocks, as in wood-engraving now, the lines to be printed were in relief. The block, after the picture or the text had been engraved upon it, was first thoroughly wetted with a thin, watery, pale brown material, much resembling distemper ; then a sheet of damp paper was laid upon it, and the back of the paper was care­fully rubbed with some kind of dabber or burnisher, usually called a *frotton,* till an impression from the ridges of the carved block had been transferred to the paper. In this fashion a sheet could only be printed on one side (anopisthographic) ; and in some copies of block-books we find the sides on which there is no printing pasted together so as to give the work the appearance of an ordinary book. There are only a few block-books which do not possess this char­acteristic, as the *Legend of St Servatius* in the royal library of Brussels, *Das Zeitglöcklein* in the Bamberg library (*cf*. Falkenstein, p. 49), *Das geistlich und weltlich Rom* at Althorp and Gotha *(cf.* Falkenstein, p. 46) ; but these belong to the end of the 15th century, and therefore to a later period than the ordinary block-books. Con­sequently, if a man wanted to set up as a printer of briefs or books, he needed no apparatus but a set of wood-blocks and a rubber.

Formerly it was the general opinion that playing-cards had been the first products of xylography ; but the earliest that have been preserved to us are done by hand, while the printed ones date from the 15th century, therefore from a period in which woodcuts were already used for other purposes. It is believed that some of the wood engravings and block-books were printed in monasteries. In a necrology of the Franciscan monastery at Nordlingen, which comes down to the beginning of the 15th century, this entry occurs : “VII. Id. Augusti, obiit Frater h. Luger, laycus, optimus incisor lignorum ” ; and on some of the engravings we find the arms of certain monasteries, which may, however, merely mean that they were printed for, not in, those monasteries. The registers of Ulin mention several wood-engravers *(formschneider),—*in 1398 a certain Ulrich ; in 1441 Heinrich Peter von Erolzheim, Joerg, and another Heinrich ; in 1442 Ulrich and Lienhart; in 1447 Claus (Nicolas), Stoffel (Christopher), and Johann ; in 1455 Wilhelm ; in 1461 Meister Ulrich, &c. In a register of taxes of Nordlingen we find from 1428 to 1452 a certain Wilhelm Kegeler mentioned as *brief- trücker* ; in 1453 his widow is called *alt brieftriivkerin* ; and in 1461 his brother Wilhelm is registered for the same craft. At Mainz there was a printer, Henne Cruse, in 1440. At Nuremberg we find in 1449 Hans, a *formschneider,* while his son Junghans exercised the same industry from 1472 to 1490. Hans von Pfedersheim printed at Frankfort in 1459, and Peter Schott at Strasburg in 1464. A certain George Glockendon exercised the same trade at Nuremberg till 1474, when he died, being succeeded by a son and afterwards by a grandson. In Flanders a Jan de Printere was established at Antwerp in 1417 ; and printers and wood engravers *(houte bild- snyters)* worked there in 1442 *(Privileges of the Corporation of St Luke* at Antwerp). At Bruges *printers* and *beeldemakers* (makers, engravers of images) were enumerated in 1454 among the members of the fraternity of St John the Evangelist. The printers of playing cards seem to have constituted a separate class. These entries show that about the middle of the 15th century there were men who exercised the art of wood-engraving and printing as a trade or craft. It seems also certain that wealthy persons and religious institutions were wont to possess sets of blocks, and, when occasion arose, they printed a set of sheets for presentation to a friend, or in the case of monasteries for sale to the passing pilgrim. A printer of briefs or block-books had no need to serve an apprenticeship; any neat- handed man could print for himself. We learn from the inventory of the possessions of Jean de Hinsberg, bishop of Liége (1419-1455), and his sister, a nun in the convent of Bethany, near Mechlin, that they possessed “unum instrumentum ad imprimendas scripturas et ymagines,” and “novem printe lignee ad imprimendas ymagines cum quatuordecim aliis lapideis printis.” These entries would seem to indicate that people purchased engraved blocks of wood or of stone from the woodcutter rather than books from a printer.

The earliest dated woodcut that we know of is the St Christopher of 1423, preserved in the library of Lord Spencer at Althorp. The Mary engraving, which is preserved at Brussels and apparently bears the date mccccxviii., is now declared to be of 1468, the date having been falsified. The next date after that of the St Christopher is 1437, found on a woodcut preserved in the imperial library at Vienna. It was discovered in 1779 in the monastery of St Blaise in the Black Forest, and represents the martyrdom of St Sebastian, with fourteen lines of text. The date, however, is said by others to refer to a concession of indulgences. A woodcut, preserved in the library at Vienna, which represents St Nicolas de Tolentino, has the date 1440, but written in by hand ; as the saint was canonized

in that year, it may refer to that event. Another in the Weigel collection representing the bearing of the cross, St Dorothea and St Alexis, has the date 1443, also written in by hand, though the woodcut is considered to belong to that period. These are the only known wood-engravings with dates anterior to the second half of the 15th century. But there exist a good many woodcuts which, from the style of the engraving, are presumed to be of an earlier date, and to have been printed partly in the fourteenth and partly in the first half of the 15th century. J. D. Passavant@@2 enumerates twenty-seven, all of German origin and preserved in various libraries in Germany, while in the *Collectio Weigeliana* (vol. i. ) no fewer than 154 are recorded, some of which are to be ascribed to the Netherlands. We know of the existence of at least five engravings which may be ascribed to the Netherlands :—(1) representing the Virgin Mary, with Dutch inscriptions, in the museum at Berlin ; (2) representing the Virgin Mary spoken of above, in the library at Brussels ; (3) representing St Anthony and St Sebastian, in the Weigel collection ; (4) a St Hubert and St Eustatius, in the royal library at Brussels ; (5) representing the Child Jesus, in the library at Berlin ; (6) the Mass of St Gregory, with indulgence, in the Weigel collection *(ef.* i. 195).

Of block-books of probable German origin the following are known :—

(1) The *Apocalypsis,* or *Historia S. Johannis Evangelistæ ejusque Visiones Apocalypticæ* (Germ. *Das Buch der haymlichen Offenba­rungen Sanct Johans).* Of this work six or seven editions are said to exist, each containing forty-eight (the 2d and 3d edition fifty) illus­trations, on as many anopisthographic leaves, which seem to have been divided into three quires of eight sheets each. The first edition alone is without signatures.

(2) *Ars Moriendi.* Of this work some authors think that there are early German editions, among others that spoken of below as the 2d Dutch edition. Certainly German is the edition of Hans Sporer of Nuremberg, 1473, in the public library at Zwickau, of another by Ludwig zu Ulm, in the Paris national library, and of that described in *Collectio Weigel.* (ii. 16), where also other, but opisthographic, editions are described.

(3) *Ars Memorandi* ; thirty leaves, folio, printed on one side, fifteen leaves being letter-press and fifteen plates.

(4) *Salve Regina,* bears the name of its engraver, Lienhart czu Regenspurck. It is composed of sixteen leaves ; two leaves (signature *a)* are wanting in the only copy known of it, which was in the Weigel collection (ii. 103).

(5) *Vita Christi* ; thirty-two leaves, sm. 8vo. Two copies in the Paris library (Sotheby, ii. 143).

(6) *The Ten Commandments for Unlearned People (Die zehn Bott fur die ungelernte Leut).* Ten leaves are preserved in the library at Heidelberg bound up with a manuscript (No. 438).@@3

(7) *The Passion of Our Lord ;* sixteen leaves, in the Weigel collection (Sotheby, ii. 141).

(8) *The Antichrist (Der Enndchrist)* ; twenty-six leaves, small folio (Sotheby, ii. 38 ; Weigel, ii. 111). Copies, Lord Spencer and coll. Weig.

(9) *The Fifteen Signs of the Last Judgment* ; twelve engravings, usually bound up with the engravings of *The Antichrist* (Sotheby, ii. 42). Copy, Lord Spencer. There is also an edition published at Nuremberg in 1472 by Junghannss Priffmaler.

(10) *Symbolum Apostolicum* ; small quarto, seven leaves printed on one side only, and containing twelve woodcuts with German inscriptions. The only copy of it known is preserved in the library of Munich (Sotheby, ii. 148).

(11) *The Legend of St Meinrad* ; forty-eight leaves. The only copy known is preserved in the Munich library (Sotheby, ii. 150).

(12) The *Acht Schalkheiten,* of which eight leaves were in the Weigel collection (i. 112 ; Sotheby, ii. 154).

(13) The *Fable of the Sick Lion* ; twelve leaves, preserved in the library at Heidelberg (No. 438 ; see Sotheby, ii. 159, pl. lxxxvi.).

(14) *Defensorium Inviolatæ Virginitatis b. Mariæ Virginis* ; six­teen leaves fol. The unique copy is in the British Museum. On the first leaf are the initials of the printer F[riedrich] W[altheren] and the date 1470 (Sotheby, ii. p. 63).

(15) The same work, twenty-seven leaves, large folio, with the imprint “Johannes eysenhüt impressor Anno ab incarnacōis dñice Mo quadringentesimo septuagesimo j° ” *(cf* Sotheby, ii. 72). Copy in the British Museum.

(16) *The Dance of Death (Dance Macabre ; Der Boten Dantz) ;* twenty-seven leaves (Sotheby, ii. 156).

(17) *Die Kunst Ciromantia* of Dr Johan Hartlieb (Sotheby, ii. 84).

(18) *Der Beichtspiegel* or *Confessionale* ; eight engravings (Sotheby, ii. 145). Copy in the royal library at The Hague.

(19) The Apostles’ Creed ; seven leaves, folio. Copy at Wol­fenbüttel.

(20) The Credo, in German ; twelve leaves, quarto. Copy in the

royal library at Munich.

@@@1 We have also evidence that sometimes the picture or figures were printed from blocks, space being reserved for the text, to be added afterwards by hand (see Bernard, *Origine,* i. 102).

@@@2 *Peintre-Graveur,* i. 27 *sq.*

@@@3 See Joh. Geffcken, *Der Βildercatechisrnus des 15 Jahrh.,* Leipsic, 1855, quarto ; Sotheby, ii. 160.