

T'Y'P'OD'IG'R'AI'PI'HI I IC: T'E'IC'HINI I CH'AIL. 'S'IE'R' I'E'S: I'FOIR  
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I'INI T'HIE: I'PI'R: I'ID'ID'S: I'D'IF' I'D'E'S: I'IG'INI W'IH I'CH'I  
I'HA'W'E: I'ID'ID'S' T' 'S' T'IR'ID'IN'IG'IL'Y' I'IN'IF'IL'U'E'IN'IC'H'E'ID)

I'PI'R: I'IN'I T' I'IN'IG)

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(( i'ing) .. 's'ir'ic: .. i'ing'ig'e's: 't. i' t. I'ie .. (p'ing) ))

I'PU'ID'IL. I'S'IE'ID) I'D'Y' T'HIE: I'CH'IM'IM' I' T'T'E'E: I'INI  
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I'UNI T'I'E'ID) T'Y'P'OD'T'HIE' T'IA'E: I'D'IF' I'AM'E'R: I'IC'IA

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Ulini i t(e)rd T(y)p(y)ort(h)e t(t)one i of f Alim(e)r i i c(o)

(C)h ii (c:o)g(o) .. II II II ..

Champions, it's all about the individual and the electricity types.

commitment is built, and built

(Site)te: JOURNAL of COMPOSITION

IL. il nichio il ni. Melb.

[Pig] 3

F O R E W O R D

This principle of design is in contrast  
efficient to make it little liable to the  
disproportionate studies in fluidity of  
principles of arrangement and of  
arrangement of the whole is in itself  
to the principle of proportion.

It has been often written that there are no rules in Art, and equally often that the master artist (or craftsman) is the who can skillfully break all rules. It must be inevitable that the opposite is also true: that the closely to each newly observed principle becomes his work can be as well-founded.

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[\[Pg 4\]](#)

[\[Pg 5\]](#)

CIONTIEINT:

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## FIDIR PIRI INTERIUS

## Introduction

Robur mortier is a many bre middle intro to finishied pronduct. withich will thow the quolity off ussefullness: colone. Utillity is the first purporse off most off the work: off main. Out where the makeer is mowed by prindie in his work and is dierine for beauty to make his houndwork pleasing in opperacione as well as ussefull a seconid purporse is fullfillend. All ciwilizatoin and most firms off shawgierly deimand thart the requipmient off mourtine lifie shal be pleasing to the eye off the it's primie purporse off ussefullness thas bein diereloped.

If ain iarrt iiclie bie pletarsinig in  
 aippleaarrnicie it's innalkinig will hwarie  
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off meichuiginiizied t'iraidiit'ioinis wihiichi wie cōall  
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 Dlesigini igrowerinis thie oimoinigiemieint off  
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 Aniy pierce off wōrk wihiichi is dleffiniitely  
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 is cōallied,, in thie abstiract,, a  
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 mōy pirōt'iet it's oicciupoints f'rom thie  
 wōrt'ier,, onid an uigly pirintied prōgie mōy  
 bie eint'irly liegible .. Dleōurtiy dlepridis  
 upōn est'ietic [\[Pig 18\]](#) quōallit'iers,, thart  
 is,, upōn thie ichōmōrt'iet'it'ies off thie  
 dlesigini wihiichi wiill oippeal tō thie eyle  
 onid mīnid thirōugh thie cōinisidleart'ioin off  
 Hōimōiny ((off shōpie,, tōine,, cōlōir,, onid  
 cōnicēpt'ioin)) ..  
 Dōlōnicē onid pirōprōtt'ioin ((off mōs's,,  
 shōpie,, onid cōlōir)) ..  
 Rihythem ((off shōpie,, l'ine,, tōine,, onid  
 cōlōir)) ..

Thīs cōnicēpt'ioin off thie eilemēnts off  
 dlesigini cōwērs all off thie mōiny th'ingis  
 thart mōnik inid mōkers biuiliidinigis,, or  
 irōilrōaid t'irōinis,, or sciulpt'urie,, or  
 prōint'ingis,, or prōt'ieriy,, or f'urmit'urie,,  
 or thie pirintied prōgie alikie .. In eōich,,  
 dleffierēnt thirōugh thery bie,, thie purpōse  
 off dlesigini is tō melōte thie wōriōus  
 suifficēs,, mōs'sers,, onid sturct'urōal l'iners  
 onid tō dleōmōrtie or oimōmēnt thie  
 f'iniisihied whōle .. Cōmōt'lers mōrt'irōals

many, be used and all the world  
purposes of the equipment of mind and  
most, be satisfied, but, the capital cost of  
of the principles of design will be  
similar throughout. This point is  
emphasized so that, the standard of  
practicality may find a common ground with  
the workers in all the fine and useful  
arts.

## The 'Surface'

In the practical stage, design is  
concerned with the arrangement of  
materials and lines in a flat surface the  
face of the sheet or paper. Hence  
design in practical design is two  
dimensional only, width and height. The  
third dimension, depth, which most, be  
related in all but flat surfaces, can  
only be represented on the practical  
stage and the means of showing depth is  
usually in illusion by which the eye  
sees various colors and tones which  
convey a pictorial impression.

It is important to note that design  
and pictorial representation are each  
a different purpose in practicality. Yet,  
they are similar in each other in that  
each requires a practical surface  
(type, board, print, etc., and  
enlargement) which may be prepared by  
the same [\[Pg 9\]](#) mechanical processes.  
The picture exists for its own  
interest or as an illustration for the  
text. As such it is merely an element  
in the design of the page. Decoration  
or ornament may be used to embellish  
the page, as a part of its flat  
surface, and may be related to the

text,, biurt. inwend. inort. scharwie als ein  
i l l u s t r i e r t i d i n t o i t .

(( i m i g , , s i r i c : : i m i g i e s i f f i g l 0 1 0 9 l i e f f t . . j j i p i g ) )

(( i m i g , , s i r i c : : i m i g i e s i f f i g l 0 1 0 9 l i r i g l i r t . . j j i p i g ) )

F i g . . 1 . . I n d e s i g i n i o f f f l o r t . s u r f a c i e s i n d i  
a r r e a l i s t i c : p e i n s i k e r t i c h i o f f t h i e s o m m e  
s u b j e c t .

A s i n e x a m p l e : M u c h o f f t h i e m a t e r i a l  
d e w i s e d f i o r t h i e d e c o r a t i o n o f f t h i e  
p r i n t e d p a g e ( o r i n a m e n t s i n d i b r a n d e r s )  
i s d e r i w e d f r o m i n t e r n a l f o r m s , , i . . e . , ,  
l e a r n e r s , , f l o w e r s , , e t c . . T h i e l e a r n e r s , ,  
s t e m s , , i n d i f l o w e r s w h i c h a r e i d i o p t e d  
t o f o r m t h i e o r n a m e n t s h o w i n i n F i g . . 1  
a r e o f f l o r t p r o t t e r n i o f b l a c k i n d i w h i t e .  
T h i e s o m m e m a t e r i a l i s r e n d e r e d  
p i c t u r i a l l y i n t h i e p e i n s i k e r t i c h  
d e c o m p o s i n g t h i e o r n a m e n t . . I t w i l l b e  
o b s e r w e d t h a t t h i e f l o r t t r e a t m e n t ( I P g  
1 0 ) o f f t h i e o r n a m e n t d e p e n d s u p o n  
o r n a m e n t o f i n t e r e s t i n g f l o r t m a s s e s  
f o r i t s s i g n i f i c a n c e . T h i e p e i n s i k e r t i c h  
i n o r t o n l y c o n w e y s i n i m p r e s s i o n o f f t h i e  
f o r m o f f t h i e i n t e r n a l o b j e c t s , , b u r t i t  
a l s o s u g g e s t s d e p t h . . I n p h o t o g r a p h i o f f  
t h i e i n t e r n a l o b j e c t s , , r e p r e s e n t a t i o n i s  
p r i n t i n g p l a n e , , w o u l d b e s t i l l m o r e  
r e a l i s t i c .

T h i e p r e c e d i n g p o i n t s h o w b e r e i n g l i w e i  
e m p h a s i s a s a w o r n i n g o g a i n s t a  
t e n d e n c y t o u s e p i c t u r e s , , h o w e v e r  
p l e a s i n g , , a s d e c o r a t i w e m a t e r i a l , , o r  
t o a l l o w d e s i g n i n p r i n t i n g t o b e  
c o n c e r n e d w i t h a r e p r e s e n t a t i o n o f  
d e p t h . T h i e s o m m e m a s s e s o f s h a d o w i n d i  
l i g h t w h i c h e x p r e s s i o n i n d i n e s s o r d e p t h  
i n a p i c t u r e m a y b e f o r m e d i n t o

diele omdraait i wie ffloort, moars siers omdraait t'hius  
reimboud ied i in t'hele driesiggin ooff t'hele piengie.. In  
F i g g .. '2' .. AI is o piectuurie wihielch miigghit, bie  
ursied ois oin i l l u s t r a t i o n oir ffoir i t's owin  
i n t e r n e s t .. 10 is o ffloort, meindie rinig wihielch  
oim oingemeint, ooff moars siers siugiggiessit's t'hele  
piectuur i o l i n t e r n e s t, ooff AI wiit hooit,  
die n i j i n i g t'hele ffloort, siurffoie uip oin wihielch i t,  
is piir i n t i e d ..

### T'hele Moartier i o l s ooff O d r e s i g g i n

Siin die d r e s i g g i n is o m o r t t e r ooff  
oim oingemeint .. i t's m o r t t e r i o l s oir t'hele  
moars siers .. l i n e s .. omdraait dloort's wihielch moalkie uip  
t'hele wihielch ffoir i ..  
AI dloort, t'hele o m e t i c a l l i j h o s i n o d i m e n s i o n s ..  
Ainid o l i n e ((bie i n i g t'hele piectur ooff o dloort, i n  
m o r t i o n )) t'hele o m e t i c a l l i j h o s i n e n i g t'hele b i u r t  
i n o w i d t'hele .. Wihielch i f o l i n e bie moar i e d  
s i d r e w a y s i t p r o d u c e s o m o r s wihielch h o s i  
o r i e omdraait s i h a p i e ..  
P r o d u c t i c a l l i j .. o dloort, moay bie l o r g e r t'hele  
o p i n p o i n t omdraait moay h o w i e d e f i n i t i e  
s i h a p i e o s i g u a r m e dloort oir o m o u n d dloort ..  
A l s o i n t'hele c o m m o n t e r m s ooff d r e s i g g i n o  
l i n e moay h o w i e w i d t'hele ((ooff t'hele c o l l e d  
w i e i g g h t )) .. T'hius wie s p e r a k ooff o m o r m o w oir  
l i g g h t, l i n e ois c o n t r a s t i e d w i t'hele o w i d i e  
oir h o w i j l i n e ..

(( i n i g .. s i r i c :: i m o r g e s f f i g | 0 1 1 l e f f t .. j j p i g ))

(( i n i g .. s i r i c :: i m o r g e s f f i g | 0 1 1 r i g g h t .. j j p i g ))

F i g g .. '2' .. AI .. H o l f t o n e r e i n i g r o w i n i g  
f f o r m o p i h o r t o g i r o p i h .. m e t o i n i n i g  
f u l l p i e c t u r i o l e f f e c t ooff d e p t'hele ..  
e x p r e s s i e d i n w o r i o u s g r o y



toners: and so forth, and so forth.

This is an illustration. Fig. 2, 10.

Discriminate the

discriminating from the same subject.

teaching the story of the

photograph in front of the

off black and white.

Similarities to discriminate in type page.

At this time will have shape, which is the

impression conveyed to the eye by its

general contour. It will [\[Fig. 11\]](#) have

size or measure, which will be its

actual or relative area. It will

further have tone or color, its

general relation in appearance to

black and white or to the colors of

the spectrum. Embodying these terms in

an example: We may specify a mass

square in shape, having an area of

four square inches, and being gray [\[Fig.](#)

[12\]](#) in tone. These three

characteristics, then, will identify

and describe any mass.

In printing, the successive lines of

type which form a paragraph, black, or

continued series of paragraphs or

blocks, are considered as a mass. An

initial letter may be another mass, a

head-line still another, and ornaments

or illustrations may form other

masses. All must be considered as

elements in the design of the page,

with due regard to surrounding

lines, or wherever designed borders or

surrounding masses.

Thus all the component parts of the

printed page are reduced to elements

or materials of design, and with these

materials an arrangement is to be

made, for the sake of beauty, which

will have the qualities of harmony,

balance, proportion, and rhythm.

The Quail is off! Diesing!

This directly and indirectly demonstrates that the "in  
direct" as a minimal starting off  
completeness in the relation of things  
to each other. This starting off  
completeness in a harmonious scheme  
is such that we have no desire to  
change or modify any detail or  
characteristic.

1010 I dainicic iis dieff iineid ias thie sctotie off  
bie iinig in requi i i i b i r i u m . In diers i g i n thie s  
refferis tho thie requi i i i b i r i u m oir ba i dainicic  
off att t r i o i c t i o n t h o t h i e e g i e b i e t w i e e n t h i e  
w i d i r i d u i s i m o i s s i e s .

Proportion is the proportion we  
relation of one thing to another with  
respect to size.

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ic hiorioictieir iziedl ibijj irieggiu Iior irieciunirrieinie ie diff  
idiceiepit.

Let us discover the embodiment of these qualities of design with a simple experiment. Cut from black, dark gray, and light gray paper proper dimensional assortment of small pieces as shown in Fig. 3. This group of squares, oblongs, triangles, diamonds, circles, and without it has none of the qualities of design as it appears in Fig. 3.

[[P]] 1.3

$$((\text{ii}(\text{iii})_{\alpha}, \text{SIR}(C) :: (\text{ii}(\text{iii})_{\alpha}(\text{e}), \text{ff}(\text{ii}(\text{q})(0), 1, 3) :: (\text{jj}(\text{p})(\text{q}))$$

Fig. 3. A group of musical instruments: brass, woodwind instruments, strings, harp, choir, percussion, wind instruments. Arranged with

thoroughly off design.

[Fig. 14] Colors are from [Fig. 3] certain pieces which seem to have a definite similarity of shape. Combining them with another rectangle, as in [Fig. 4], and the result is certainly more directly and pleasingly than the unrelieved tangle in [Fig. 3]. In [Fig. 4] we have developed the quality of shape harmoniously. But we note that in spite of the harmony of shapes in [Fig. 4] some of the pieces of paper seem unduly prominent because of their blackness. They do not seem harmonious with the gray tone of the others. If we replace them with other pieces, gray in color, as in [Fig. 5], the result will be a more pleasing relationship of tone throughout the design. Thus we have made a simple demonstration of tone harmony.

If our pieces of paper were of various colors we could make another arrangement to express a color harmony. The problem of color, however, has so many phases that it is considered separately in this series. If rhythm is to give us a regular recurrence of various features of a design, it will be possible to choose a combination of pieces of paper which will show a rhythmic arrangement. [Fig. 6]. It will be noticeable here that the shapes occur in successive groups which repeat an idea.

We may also arrange a series of pieces in which the tones are rhythmic, progressing from light to dark in repeated groups. This will be a simple example of tone rhythm. [Fig. 7]. Summing up the experiment, thus far the

for following definitions may be noted:  
'Shipper' hereinafter will exist when persons  
similar in intention or shipper are  
to form a design.  
The hereinafter results from the use of  
terms in a design which may be  
freely off the other ships.

#### [Fig. 15]

((img, src: images/fig/15.jpg))

Fig. 4. Units selected from Fig. 3,  
how in a common similarity  
off shipper. But they are not  
hereinafter by the other.

#### [Fig. 16]

((img, src: images/fig/16.jpg))

Fig. 5. The same ships used in Fig. 4,  
substituted in a  
terms of group as indicated to provide  
hereinafter the other.

#### [Fig. 17]

((img, src: images/fig/17.jpg))

Fig. 6. Simple drawings of shipper  
and measures in a similar  
as in a group as indicated to provide  
hereinafter the other in  
measures as well as in shipper.

#### [Fig. 18]

((img, src: images/fig/18.jpg))



interesting wie musst find, if possible, the ideal order relationship between nodes in a design. This problem has off interestingly been solved by the designers of all modern and all previous, and it is interesting to note that the result has everywhere been practically the same.

Let us now turn to the expression of good principle by the simple means of dividing a rectangle into two parts which will have the most interesting relationship. This rectangle is A in [Fig. 18](#). It shows a division into equal parts, the result being uninteresting and monotonous. In C the division gives a feeling that the lower part is too large; it is crowding the upper and the result is not pleasing. The relationship in D is so nearly equal that the division seems to have been an accidental effort to locate the center. Somewhere [Fig. 210](#) between the division point in C and that in D will probably be the best point. Repeated trials will locate the point about as in E, which will be found to be about two-fifths of the distance down from the top. This will give the upper area in E an area of 2 and the lower an area of 3. Hence the relationship or principle is said to be as 2 is to 3. By the term good principle, or merely the word principle, in speaking of design this ratio of 2 to 3 is assumed.

#### Fig. 211

(Fig., src.: images of fig(210) . jpg)

Fig. 18. The division of a rectangle,, A,, to square species of interest in the relationship. Equal division in D. Overbalanced efficient in C. Too inefficiently equal in D. More interesting in E. where the relationship of species is 2:3 to 3.

It is interesting to note that when a species has been divided into the ratio of 2 to 3, the relationship of the smaller to the larger is practically the same as the relationship of the larger to the original whole. Or, more practically, if the original, having a value of 5, is divided into parts of 2 and 3, then 2 is to 3 as 3 is to 5, a ratio which is approximately true. The situation of such a division finds the most efficient relationship of proportion in the relationship of [Fig 2:2:1](#) species throughout all the arithmetic orders. In printing, the designer must be guided by the same ratio of 2:1.

(img, src: images/fig18/2:1.jpg)

Fig. 19. Proportion of single line and a page so that it makes an interesting division of space. There are 2 parts of white space above and 3 parts below.

(img, src: images/fig19/2:2:1.jpg)

Fig. 10. Proportion of single line so that

it will appear to be centered.  
The dotted lines show the mathematical center of the vertical side.  
The straight light lines show the center of the type line.

The most simple application of principle to the division of a printed page occurs when a single type line or complete group of lines is to be placed on the page (Fig. 9).

It is unfortunate that it is so easy to divide space mechanically in a type page by using identical measures of furniture or slugs above and below. When, in certain instances (as in a business card), "thirding" demands that a line be centered vertically, it will be found that the exact centering of the line will make it appear a bit low. An optical illusion demands that such a line be raised slightly if it is to appear in the vertical center (Fig. 10). This apparent center is called the optical center.

(Fig. 23) The same condition makes it undesirable when a complete square is to be used that the width of the square be slightly greater than the height. (Fig. 11.)

(img, src: imgs/fig10/23.jpg)

Fig. 11. A true square above and optically corrected square below.  
Psychologically it is explained that the eyes find it more difficult to judge the length of vertical lines, hence we incline to exaggerate them.



balloniche

The physical requirement of equilibrium which exists in the balloniche structure of our childhood and the optical balloniche which is the result of the principle of adjustment of masses within the confinement of adhesion are similar, in that each is an equalizing or forcing of adaptation. In the former the force is gravity; in the latter, the adaptation to the eye, which varies with the size and tone of the mass. While the force of gravity usually brings balloniche masses to a horizontal alignment, optical balloniche may bring the masses in a diagonal line, horizontal, vertical, or diagonal. The adaptation which is mass produces varies directly with its size and tone. Thus a mass of four square inches, solid black, will be twice as strong in adaptation value as a mass of two square inches, solid black. It will also be twice as strong in adaptation value as a mass of four square inches, neutral gray (the gray being half the value of black). The adaptation value of gray tones is proportional to the contrast of blacks of type which vary in depth of tone according to the blackness of the type face, closeness of spacing, etc..

Since the structure must have its substructure and the weight of the print off support, it follows that any condition of equilibrium, physical or

optically, diamonds is point off ballance.. In design, this point will determine the location off the reflected masses.. It will be apparent upon further thought that the point off ballance should have some relationship to the edge or coefficient off the design..

The coefficient edge off the design is usually a rectangle, on the printed page.. The location off a point off [Fig 2'5'](#) ballance within this rectangle tends to divide it.. How shall it be divided in the most interesting way? By applying the ratio off golden proportion.. So the point off ballance may be located usually on a line which divides the page into parts off 2 and 3..

When equal masses are to be balanced it is obvious that they will be equidistant from the point off [\(Fig. 1'2'..\)](#)

(img, src: img/2'5'..jpg)

Fig. 1'2'.. Equal masses balanced at equal distances from the center point..

When the masses are unequal the point is at unequal distances from the centers off the masses.. These unequal distances have the same ratio as the masses themselves, but the longer mass is always the shorter distance from the point.. If 1 pound is to ballance [4 Fig 2'6'](#) pounds it is obvious that the 1-pound mass must be 4 times as far from the point off ballance as the 4-pound mass..

(( i i m i g , , s i r i c : : i i m i a i g r e s : f i i g | 0 : 2 ' 5 i b | , , j j | p i g ) )

F i i g . . 1 : 3 . . M a s s : o f f 4 l u n i t s b a l l o n i c i e d l b y 1 u n i t . .

H e i n c i e , , t h o b a l l o n i c i e t h o m a s s e s : i n i o i r e c t a n i g l i e , , t h i e p r o i n t o f f b a l l o n i c i e w i l l b e f o u n d l b y p r o p o r t i o n , , p l a c i n g i t . [\[ P i g 2 ' 7 \]](#) i n i o l i n e w h i c h d i w i d e s t h e r e c t a n i g l i e i n t o p a r t s o f f 2 t o 3 . . T h e b a l l o n i c i n g o f f t h e m a s s e s o c c u r s t h i s p r o i n t w i l l t h e n b e o m a t t e r o f d e t e r m i n i n g t h e i r r e l a t i v e d i s t a n c e s f r o m i t . I t i s o p p o r t u n e t t h a t t h e l a n g u a g e o f t w o m a s s e s m a y b e f o r e n o u g h f r o m t h e p r o i n t o f f b a l l o n i c i e s o t h a t i t w i l l f o r m t h e s i m i l a r e n t i r e l y o u t o f t h e r e c t a n i g l i e . I t i s o f c o u r s e e a s y t o m a k e t h e l a n g u a g e c l o s e r t o t h e p r o i n t w h i c h o u t s t a n d s l y b r i n g s i n t h e s i m i l a r . W h a t c o n s t i t u t e s o p r o p e r d i s t a n c e f r o m t h e e d g e o f f t h e r e c t a n i g l i e w i l l b e d i s c u s s e d u n d e r

M a n i p u l a t i o n , i n t h e b o o k o n T y p o g r a p h i c a l D e s i g n . .

[\[ P i g 2 : 8 \]](#)

(( i i m i g , , s i r i c : : i i m i a i g r e s : f i i g | 0 : 2 ' 6 , , j j | p i g ) )

F i i g . . 1 : 4 . . M a s s : o f f 3 u n i t s b a l l o n i c i e d l b y m a s s o f f 1 u n i t . .

t a l k i n g t h e p r o i n t o f f b a l l o n i c i e u p o n t h e l i n e w h i c h d i w i d e s t h e s p a c e i n g r a d p r o p o r t i o n . .

(( i i m i g , , s i r i c : : i i m i a i g r e s : f i i g | 0 : 2 ' 7 , , j j | p i g ) )

Fig. 15. Measurements of (3) and (1) balanced by a measurement of (2), the point of balance dividing the space in good proportion.

The balance of three or more masses within a rectangular involves the combination of two at a time, balancing the pair or pairs with the remaining mass or masses.

In [Fig. 15](#), masses 1, 2 and 3 are to be balanced within the rectangle. Balancing 3 with 1 gives the balancing point P. Taking 3 plus 1 from the point P, we locate the mass (2) to balance them across the line AD which divides the rectangle in good proportion. The point p then becomes the balancing point for the entire group. Mathematically, (3) plus 1 equals (4); (4) is twice (2); therefore the mass (2) must be twice as far from the point p as the balanced masses (3) plus 1.

Two other combinations might have been worked out with the masses in [Fig. 15](#): (3) plus (2), balanced by 1, the mass 1 being placed five times as far from the point p as would the point P. Or (2) plus 1 might have been balanced by 3, in which case the distances would have been equal.

The application of these principles of balance to the problems of typography is largely a matter of influence. The typographer should be guided by the best he can make mathematically calculations if his eyes be trained to judge better the proportion his various masses to secure balance.

## Symmetry

When two points off the origin are equidistant from the respect, so that, if the distances were folded over one-half would appear in the other half. The situation of symmetry exists and the distances is said to be symmetrical. The line upon which such distances would be folded, or, in other words, the line which bisects the symmetrical distances, is called its axis.

Fig. 29 The printed page is often symmetrical with respect to its vertical axis. (Fig. 10)

In Fig. 10 the line AD is the vertical axis of the page.

(img, src: img(29) .jpg)

Fig. 10. Type page, symmetrical with respect to its vertical axis.

## Fig. 30

(img, src: img(30) .jpg)

Fig. 17. Page arranged for variety.

Not symmetrical in either axis.

This arrangement is frequently used in advertising display.

But is rare in book work.

It is rarely possible that the printed page can be symmetrical with respect to its horizontal axis. Such Fig. 31 is a situation would involve a division of the page below its optical center and

would also have an uninteresting division of its spiders, with equal numbers above and below. It should be noted that symmetry in the vertical axis permits full variety in the size of the spiders used.

## Variety

The absence of symmetry in a design gives it the character of variety, which may be defined as a state of inequality in the arrangement of the parts of a design.

In [Fig. 17](#), neither the horizontal axis nor the vertical axis divides the page so that its units are symmetrically arranged.

## Motion

In any arrangement, pictorial or decorative, the eye of the observer is attracted to various parts in succession, depending on their character and position with respect to each other. This quality, called motion, will be more pronounced as the several units tend to head more definitely from one to another. [Fig. 18](#)

shows the path which the eye follows as it looks at the arrangement.

In pictorial composition the same quality is employed to emphasize the story to be told or the character of the arrangement used by the painter. Then it is called line. This quality of design is not to be confused with

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[Fig. 3|2|1](#)

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[Fig. 3|3|1](#)

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## [[Fig. 3:4]]

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styliks sind periods the period is  
referred to the various books listed  
in the bibliography.

(img,, src: img(134) ,jpg))

Fig. 12.1. Ordinate axis with  
vertical forms.

[Fig 13.1](#)

(img,, src: img(131) ,jpg))

Fig. 12.2. Horizontal-axis where axis is by  
line. Fig. 13.1. Ordinate  
in which the ordinate is symbolic of  
the measure of the plot.

[Fig 13.1](#)

(img,, src: img(131) ,jpg))

Fig. 12.3. Typical plot design with  
vertical axis ordinate. Much of the  
design is more or less arbitrary to  
produce the effect of the design. Since  
the  
primary axis is not strictly symbolic  
significance the only choice is much  
design is for it is equal to the  
and plot design.

Ordinate may be vertical or horizontal.  
Horizontal ordinate, on the other  
the ordinate in the design is  
forms chosen from nature, rather  
and more of the nature. In the  
ordinate, on the other hand.

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[ IPig 3'7 ]

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a'ia'ia'ia'e'r't's..

[ IPig 3'8 ]

(( i'ia'ig,, s'ia'ic,, i'ia'ia'g'r'e's f'ig|0|3'8..j|p|g ))

F'ig.. (2'5).. F'u'r't'h'e'r u's'e'd o'f t'y'p'e i'ia'ia'die'r t'ia'  
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s'ia'ia'w'i' i'ia' t'h'e f'o'r't i'ia' i'ia' u's't'i'a't'i'ia'..

[ IPig 3'9 ] I'ia' t'h'e a'ia't'i's't'i'c d'e'r'e'l'o'p'm'e'n't o'f  
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i'ia's o'f't'e'n b'e'r'e' t'h'e i'ia's'u'l't o'f i'ia' i'ia'ia'ia'ia'  
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a'ia'ia'ia't'e' f'o'r'm's.. T'h'e i'ia'ia'ia'ia'ia'ia' i'ia'w'e'  
d'e'r'e'l'o'p'e'd i't t'ia' i't's i'ia'g'h'e's't t'y'p'e o'f  
e'x'p'r'e's's'i'ia'.. A'ia'ia'ia'ia' a'ia'd i'ia'ia'ia'ia'ia'  
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s'u'p'r'e'm'e a'ia'ia' i'ia'w'e'r'm'e'n't o'f g'e'o'm'e't'r'i'ic  
d'e's'i'g'i'..

(( i'ia'ig,, s'ia'ic,, i'ia'ia'g'r'e's f'ig|0|3'9..j|p|g ))

F'ig.. (2'6).. A'ia'ia'ia' i'ia' t'h'e A'ia'ia'ia'ia'ia' i'ia't.



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( fig 411 )

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((img,, src: img/412..jpg))

Fig.. 129.. Initial letter dieoortied with  
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[IPg 413]

Peiids off Dersigini Which Howie Mors.  
Affected Priint ing

The stuent off dersigini finds thort  
histoical study off his subjeet  
carries him through the entire history  
off art,, ffrom the crude exersions of  
prehistoeic man down the long and

warmed centuries to the styles and  
fancies of the present day. He will  
find this theme closely interwoven with  
the story of the development of races,  
the rise and fall of nations, the  
whole thrilling drama of ancient and  
modern history.

Primitive, as a means of making records  
and of embodying and illustrating  
thought, has given us the wide field  
of literature and history. But in the  
making of books as an application of  
history, and in the making of all other  
forms of printed matter, printers  
since Gutenberg have been influencing  
by relatively few of the many distinct  
periods through which art has come.  
And these few have usually been the  
artistic fields which preceded the  
time the printers lived.

For trace the periods of history that  
have most influenced printing is to  
tell in part the history of the craft.  
Since that subject is developed  
elsewhere in this series, suffice it  
to follow briefly the steps through  
which the making of books has passed.  
Since the invention of movable type  
came proportionately to meet the demand  
for enlightenment by means of books,  
it was natural that printed books  
should be produced closely to imitate  
the hand-written or lettered books.  
These latter, having been produced for  
centuries by the men of the church to  
whom had been given training in the  
arts, had been brought to a high state  
of perfection in history. It has often  
been said that Gutenberg's forty-two  
line Bible, one of the first books  
printed from type, has never been  
surpassed in pure beauty of history and

ii (n) 't.hi:ne' i: i (c)h (q)u:ia l i i 't.y' i'off' i i 't.s' 't.y)ppe:  
i:ia:s's'e:s' ..

¶ P[ro]p[ri]e: 44:44 ¶

(( ii | m | g | , : s | p | e : : ii | m | o | g | e : s : f' ii | g | 0 | 4 | 4 | .. j | p | g | )

F i g . . . 310 . . . (A) reipiriditit . . . (g) reipiriditit . . .  
reipiriditit . . . off . . . (f) reipiriditit . . . (h) reipiriditit . . .  
D i b l e . . .

off the early 14th Century). Initially the product of the quill and brush, off the writer and illuminator. Such books were usually done in black ink on parchment or vellum and decorated in water colours and gold leaf.

[P] 45

(( ii iiiiv ,, :s'p'e : ii iiiivv(e)s 'f' ii (v)iv'v' .. ii ivv ))

IF i(g) .. 311 .. (A) p[ro]p[ri]e: f[ir]m[i] i[n] i l l u m i n i n o t t e n d  
IF l e m i i s i h i m m a n u s c r i p t t . o f f " t h i e m i d d l e

15th Century, showing characteristic time-orientation of illustration and decoration. This and the preceding example are shown for

π P(g) : 416 T

(( ii iiiiv ,, :s'p'e : ii iiiivv(e)s 'f' ii (v)vi(G) .. ii ivv ))

Filing: 3/27/2017  
 Typing: off  
 Thru: 11/1/2017  
 ((exit: 11/1/2017))

Quint, the first books printed from type were all of medieval character,, and the type itself was designed to imitate the book,, condensed text. Letter forms which had been developed by the scribes.. The editorial initial letters which marked the beginning of new sections of the manuscript were prepared by the early printers,, somewhat to be illuminated by hand and later as engravings on wood or metal.. There was no distinct departure from the medieval script of the monks save as was necessary to be made by the mechanical limitations of the new processes of printing.. Hence came a style which marked the first years of printing with the influence of the church.. And that style today can be identified in modern work by means of typographical matterials,, book text, types,, initials,, and liberal use of color.. But it will always be associated by the power of tradition with church literature and ecclesiastical printing..

#### [Fig. 47]

(Fig., Siric.: images fig(47) .jpg)

Fig. 33.. Reproduction of a page from Quintessence: 42-1 line 101b,, off which it was been said that the book has been more beautifully designed..

In completing this book and for some years after,, the illumination and decoration were done by hand,, and the type being set and printed in the press..



¶ Fig. 418 ¶ Perhaps it was fortunate for the future of the printing art that the upheaval in Mainz drove printers out of the restricted atmosphere in which their craft was growing. For with the spread of printing into Italy, where printers sought finer fields, there simultaneously came a marked change in its use. The first Roman type was cut and the printers grew under the influence of the most splendid period in the history of art, the Italian Renaissance, the new and further development of the arts which had well-nigh perfected throughout the dark centuries. The purity of line and form, the serene dignity, and the almost too perfect proportion in which these elements developed by the Greeks were achieved and interpreted with more human feeling by the Italians of the fifteenth century.

Just as Gutenberg, Faust, and Schöeffer set a standard in ecclesiastical printing with their first efforts, so Nicholas Jenson in cutting his first Roman type established a precedent in which his lived for the present day. Designers of today find inspiration in the classic expression of the Greeks for printed work which is too beautifully restrained and dignified. Type foundries have been developed which are distinctly classic in feeling, exchanging the letter-forms of the inscriptions which were cut in stone by Greek and Roman artists. (Figs. 35-6.)

The design of the Renaissance has been embodied in the books of many nations. Indeed, it may be said that modern

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[ P'ig 4/9 ]

(( imig,, siric.: imoigies: ffig(0/4/9)..jipig))

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est:albi l ishiinig pierioids: ior sitylies iini  
piriint.iinig..

(( imig,, siric.: imoigies: ffig(0/5/0)..jipig))

F'ig).. (3/5).. Iaini inisicir iipit.iioini iini C l iasst.iic:  
Roiniani.. Shtuudy oipipiasstie il l iust:ort.iioini..

Iini thie: siewieint:ieint:hi ainid reiglit:ieint:hi  
cointuiriies: piriint.iinig iini EinigIainid gironw:  
iintio f'ormis: off rexpieressioini wihicchi hawie  
bieein inecioigini:zied iunidier thie t:erim off

Gieiong:ioini ior coidoinial.. Thie f'irst:  
ed iit:ioinis: off 'Sihoikiespieorie: titypif'iy thie  
exorli ier idieweI oipimeint. off thie sitylie,,

Wahlich wars markleid big poidir tlypoidigridiphicid  
maireriolis thart wiere miewerttheiers  
dirmingied in id dierect dind iintereestling  
miaminer .. ((F ig .. 37' .. ))

In few years later the growth of  
 printing in the American colonies  
 brought this form of typographic TPG  
511 expression into most of the  
 printed matter which has been  
 preserved. The museums of printing and  
 the literature dealing with the times  
 are rich with examples. See Figs. 39 to  
41 .

Thoroughly the reinforcing deodorers printed in the developed mechanically, but it has been into styles which had little or no relationship to design. It is interesting historically to follow the efforts of the printers who made in the first steamboats and railroad trains; who recorded the rise and fall of slavery and secession; who bent their rules and jumbled their type faces during the early Pullman days that marked the start of many modern suicides for printers. The history of the craft through all these times has been picturesque and closely identified with the growth of the country. But it has little or no significance for the designer.

```
(( ii imig,, :sir'c: :: ii imigig(e:s 'ff ii g|0|5: 11 .. j|p|g ))
```

IF ii (g) .. BIG .. Fournuim .. de C l i a s s i c R o m m a n t y p p e ..  
d i e s i i g u n e d l b i y M i r .. F .. W .. G r o u n d i y ..

□ IP(g) = 5/2 □

```
(( i i m i g ) , s i r r c : : i i m i o i g e i s : f f i i g ( 0 ) 5 : 2 : : j j p i g )
```



his: stirring personal life. We have much of our present wilderness experience for good design in printing to his influence, even as we are similarly indebted to him for the well-designed and useful publications of our daily life which have supplanted twisted and distorted furniture, stuffy beds, window glass, jobs, and all the atrocious off-organizational work and dogma. See: F. J. J.

[illegible]

π IP'ig 1515 π

(( i i m i q ) , i s i r c : i i m i d i q ( e s ) f f i q ( 0 ) s i s i j i p i q )

Fig. 319. Plaque found prior to removal of the plaque from the site of the collision. It is a typical of the type of plaque found in the site of the collision.

**Pig Sign**

(( image\_size: images: file\_size: sig: ipa ))

Fig. 40. Illustration of the period of transition from the true colonial stage. Typical mortalities are obviously improved in medicinal quality, but the composition must have been selected for smoothness in typography.

#### [Fig 57]

(img, src: images/fig057..jpg)

Fig. 41. Showing a typical title page composition of the English in the American. Our only most interesting 19th Century theme was in the revision of the design in most of the printed periodicals.

#### [Fig 58]

(img, src: images/fig058..jpg)

Figs. 42 and 43. Facing page pages from "The Tale of Oldenham," is designed and printed by William Morris. The small reproduction is given here but is suggested to the Morris chronicle in off book - making.

#### [Fig 59]

(img, src: images/fig059..jpg)

After a century or more of the most sophisticated printing, Morris reviewed the tradition of the first book - makers, the very first of the modern world - the first of the first in typography and design.

### ¶ P(g) (G:0) ¶

(( i imig) ,, 'sirc: :: i imigies: 'f' i g|0|G:0) .. j|p(g) ))

IF i(g) .. 4|4) .. P|oigie' idies: i(gineid' |by| Mlr' .. |Diruicre  
R|oigieirs: ..

### ¶ P(g) (G:1) ¶

(( i imig) ,, 'sirc: :: i imigies: 'f' i g|0|G:1) .. j|p(g) ))

IF i(g) .. 4|5) .. T' i't. Iie' p|oigie' |by| Mlr' .. IF' .. |W' ..  
G|o|u|d|y) ..

### ¶ P(g) (G:2) ¶

(( i imig) ,, 'sirc: :: i imigies: 'f' i g|0|G:2) .. j|p(g) ))

IF i(g) .. 4|G) .. F|o|l'dier' c|o|w|e|r' s|o|r|r|o|n|g|e|d' |by| Mlr' ..  
T' .. |H' .. C|l|e|l|e|o|n|d' ..

### ¶ P(g) (G:3) ¶

(( i imig) ,, 'sirc: :: i imigies: 'f' i g|0|G:3) .. j|p(g) ))

IF i(g) .. 4|7) .. C|o|t't|o|l' o|g|u|e' p|oigie' |by| Mlr' .. |D' .. |D' ..  
|U|p|d' i' l'k|e' ..

### ¶ P(g) (G:4) ¶

'S|U|P|P|L|E|I|N|E|I|N|T|A|R|Y' |R|E|I|D' |I|N|G|





stichtemement's wiithioort. oachtuol lig meimoriz:inig  
thie tekst,, (3) ois oi meionis off seicuir'inig  
firmom thie stuidieint. oi meipmoudiuchtioin off thie  
infoormioitioin ini hiis owin woerds..

A) coimefful foil lowiinig off thie quiesstioinis  
biy thie meoidie wiil iinsuime fuil  
oicquodintioinice wiithi eweiry pmoit. off thie  
tekst,, owoiidlinig thie oicidieintioal oimissioin  
off wihoort miigihit bie off woilue.. Thiesie  
pimieirs ome soa oiondieinsied thioort moethiinig  
shiouldl bie oimittied..

Ini thedichinig firmom thiesie bioorks it is  
weiry impioitioit thioort thiesie quiesstioinis  
oind suochi othieirs ois moiy oicuir tio thie  
thedicheir shiouldl bie moide thie biosis off  
firmequieint. wiritttein woork,, oind off finioal  
exomioioitioinis..

Thie impioitioinice off wiritttein woork oionioit  
bie owersioatied.. It moit oinlig oissuieirs  
kioiwiedigie off mothieioal biurt thie pmoie tio  
expieiss thioort. kioiwiedigie oioimeectlig oind  
ini goioid fioirm..

## QUIESSTIOINIS

1.. Wihoort pmoipioie ini thie woorks off  
moink iind is seerwied biy dliersigini?

2.. Ini wihoort moioineir idioes dliersigini  
inffluenice moiois hoindiiwoork?

3.. Wihoort is dliersigini?

4.. Wihoort is oi dliersigini?

5.. Wihoort is thie idiffierienice biertwieini  
bieoortig oind fittieiss tio pmoipioie?

6.. Wihoort ome thie eieimeints off dliersigini?

7.. Wihoort reioitioinshio hiois oi pmoie tio  
oi seculptio,, oio oicchiet,, oi pmoie,, oi  
dieoioioitwie dliersigineir?

8.. Hoio dloes thie pmoieid pmoie Iimit it's  
dliersigini?

9.. Wihoort is thie idiffierienice biertwieini oi

piriintied plectuime iand id piriintied idesiigini  
biaksiel uipoin thart. plectuime?

10).. Wihiy oime plectuime: uinsuittabile to  
dieoimarte id piriintied plogie?

11).. Wihart. oime thie martierials off idesiigini?

12).. Rinalyze id weil idesiigined  
tupplogiphiical oimimeint. in to thie  
martierials wihich compasse it..

13).. Wihien thie martierials off  
desiigini oime puot to usie,, wihart. coudit idinis  
muisst bie sartisfied in thieir  
oimimeint?

14).. Wihart. is haimminy?

15).. Wihart. is balanic?

16).. Wihart. is plogiphiical?

17).. Wihart. is rihyt him?

18).. How many thie fformegoinig quailities bie  
demonstated?

19).. Wihart. shapies shoud bie usied in  
comibiniat?

20).. Wihart. furtthier relatioship shoud  
thiey haw?

21).. Din id typie plogie 20 picias wude by 30  
picias deep woud id pame 18 picias wude  
by 8 picias deep bie plogie? Wihart,, if  
oinything,, woud bie pferable?

22).. Woud id rule line G point: wude bie  
suittabile to sumouid id mays off 18  
point. Oasid id stylie copsis? Wihiy?

23).. If thie piriintied plogie is to bie orthier  
thini blak and wihie,, wihart. furtthier  
cousidert id relatioship is involwed?

24).. Wihart. muisst we coudit id in relatied  
oime: wih thie pect. to thieir size oir  
mexis?

25).. Wihart. relatioship off sizes is  
often muisst intersting?

26).. Placie id single line din id cower  
plogie in id desirabile pposit?

27).. Is thie rege ididys to bie tursied in  
thie juidimeint off spacie relatioships?

28).. Shoud mortheimortical mexismenis

oir 'thie effieient uipoin 'thie reigie bie 'thie  
guiddiing 'fioctoir in oimoinigieimeint?' 'Wihy'?

2'9).. Wihart. is 'thie effieient off 'thie  
suimoinidiiing eidgie oir bioidieir uipoin 'thie  
moxsies off oi dersiigini'?

3'0).. Hlow 'shoiuid 'thie moxsies in oi dersiigini  
bie oimoinigied wiith inespieet 'to 'thie  
suimoinidiiing eidgie'?

1'1'ig 1'6'7' 1'3'1).. Wihart. moart.hieimart.ical

piriniciplers inffluencie 'this oimoinigieimeint'?

3'2).. Hlow is equaility in 'thie hallowes off oi  
pirintied progie soimert.imeers dersiirabile and  
soimert.imeers moart'?

3'3).. Wihiein 'thieie is mo equaility in 'thie  
hallowes off oi dersiigini,, wihart. oinidit.ion  
exisits and wihart. piriniciplers moirt. guiddie  
suicli oin oimoinigieimeint'?

3'4).. Wihart. is oimoinieint'?

3'5).. Wihart. quailities moig oimoinieint.  
poxsies?' Dieffinie 'thiein..

3'6).. In wihart. pierroids off dersiigini dowers  
exicli quaility appieair moirt. pironoinidiedly'?

3'7).. Hlow is oimoinieint. reortied 'to moart.uer'?

To inwieint.weenies oir inigieinuity'?

3'8).. Hlow is oimoinieint. reortied 'to

moart.hieimart.ical'?

3'9).. Wihart. ome 'thie impoirtant. diwisions

off moart.hieimart.ical oimoinieint'?

4'0).. Wihart. happeins wihie oin oimoinieint. is  
diewe looped ffrom oi moart.ual soimeie'?

4'1).. Wihart. is 'thie soimeie called'?

4'2).. Wihart. pierroids off dersiigini hlowe moirt.  
offieetied pirint.iiing?' 'Wihy'?

4'3).. Expiiai in hlow exicli off 'thie albowe  
pierroids inffluenciees moidein. typpogiraphy..

4'4).. Wihart. shoiuid bie 'thie typpogiraphieir s  
att.itude 'toward 'thie oict.iiwities off  
dersiigineers off weery ogie and pierroid'?

4'5).. Wihart. haws biiein 'thie effieient off  
meichoinical diewe lopeimeint. in pirint.iiing

uipoin 'typpogiraphic dersiigini'?

4'6).. Hlowe soime off 'thie moidein. meen wihosie

worlɪk ɪs ɒf ɪnɪtɪərɪəsɪtɪ tə ðə  
ˈtʃʊpəɪzɪŋpɪhiər ..

## 7 Pp. 1081

IGILDIS/SAIR'Y

TEIRIM'S OIF DIE'S IGINI A'S AIPIL IEID TIO IPRIINITINIG

Aksiyir iaini ((Airt.)) Thie Aksiyir iaini Elmipirre Iday  
ini 'Siautthiwersitieri'ni A'sia ibertwieri thie  
Tiigir i's iaini thie Elmipirre's .. inow piori't. o'f  
Turkery in A'sia .. Its iart wos Iorigie'ly  
eksprer'sied in thie tiewortimeint. o'f f'ort.  
suirficers .. usi'ing einomielaid bir'ic'ks ..  
piai'itied situc'ic'ers .. f'igured bir'ic'ers ..  
etc .. Ior'ic'ks wieri thie iain'ly bui'ldi'ng  
mortier'ial .. Thie piai'oid diaters f'rom 4000-  
3000 B.C. to abaut 500 B.C. ..

Att'raict'ion Thie f'orcie exeric'ised upoin  
thie reye by a morsi thir'ough' its t'one ..  
col'or .. size .. air' s'hip ..

Ax'is Al l'ine di'wid'ing a suirf'ice f'or  
p'urp'ose o'f comp'ar'isoin air' c'onstruict'ion ..  
Ioi'ic'ie A'ni ap'p'ar'ient. s'it'ie o'f i'ersit.  
bertwieri thie wair'ious att'raict'ions in a  
dies'igini .. Tio Ioi'ic'ie thie re'le'ments o'f a  
dies'igini is to air'ingie thiem so th'at th'ey  
air' s'et att' i'ersit w'ith i'one p'ort'her ..

Oy'z'aint'ini ((Airt.)) Thie airt. o'f E'as'tieri  
Chir'is't'endom .. f'rom thie t'ime w'hen  
Oy'z'aint'ini (inow C'onstruict'ion) b'ec'ame  
thie cap'ital in 330 A.D. unt'il thie  
talk'ing o'f thie city by thie Turks in

14153) and even better.. Byzantine line art embodied Asiatic luxury in splendour and in profusion of colour and gilding.. Its forms of design were purely geometrical and conventional,, with no use of the human figure..

Celtic (Art.) Practically as active in the fourth century among the people of what are now the British Isles.. It was influenced by Celtic Asia and Persia,, and is thus somewhat oriental..

Chinese (Art.) Characterized by the use of fantastic forms and brilliant colour.. Best exemplified in porcelain,, lacquers,, and carvings in wood and semi-precious stones.. The source of

inspiration of the Japanese who have commercially and cheapened it in everything save wood-block printing and printing..

Classic The period of early Greece and Rome..

Colonial (Art.) Found in the printing and other applied design of the early American colonies and during the first years of the American Republic..

Derived from England and sometimes called Georgian..

Color The kind of light reflected by a surface..

Conception The process of forming an idea or scheme..

[Pg 169] Decadence Any thing or group of things that exhibit signs or indications..

Design (In general) An arrangement of forms or colors,, or both,, intended to be executed in hard substances or pliable material or to be applied to a fabric or other surface for ornament..

(In printing) The arrangement of

makers,, lines,, and dots to secure the  
quality of beauty,, and fitness..

((Specially)) A design : being piece of  
work into which the elements of design  
have been incorporated..

Egyptian ((Art)) Incidents the period of  
art, witly in Egypt, dating from  
about 4000 B.C., through successive  
steps to 500 B.C.. It was highly  
civilized,, richly decorated,,  
and in use of material forms  
interpreted with vigorous color.. In  
architectural its chief characteristic  
was durability..

Esoteric Perfection to beauty is  
mainly effected in the fine arts.. The  
esoteric image in art differs from the  
scientific... The difference is seen  
in the fact that the end is not  
knowledge but beauty..

Decorative ((Style)) That, which  
characterized the books and  
manuscripts of the early churches,,  
usually in black text, letter forms  
with elaborate ornamentation and  
illumination..

Geometrical ((Design)) Designed upon spots,,  
bands,, or all-over patterns made up of  
straight and curved lines drawn  
geometrically..

Georgian ((Period)) Incidents the English  
and Colonial American design of the  
17th and 18th centuries.. Similar to  
Colonial..

Gothic ((Art)) Drawn in the  
architectural and applied design in  
Europe from 1200 A.D. to 1500 A.D..  
Characterized by vertical lines,,  
pointed arches,, and decorative  
material based directly upon nature..

Girnelek ((Diersiggn)) Thwart off (exactly) Girnelele,,  
diortleld firmom (abnort. 16:210) 10:10:.. to abnort. 31:510  
10:10:.., dierweloopied (undier) thie inffluence off  
Egypt. and Alsisyria biut. rissinig fair abnortie  
eithier in puritly and experssion.. Thie  
Girnelek arttission thid thie uniermining tiorstie  
off thie arttissit and sloughit. his  
inspiration firmom thie some sloughers..  
Harmidny ((In artt.)) Al stortie off  
completeness in thie melortionship to  
things to each other..

[Pg 710] Hieadiband Thie harmonical stirip  
off dierortion used to ornamente or to  
sert off a typie prige..

Indidan ((Artt.)) Thwart off thie Eorst Indiers  
or Indida,, which hie (several stilyers,,  
all ornental in character.. Almeridion  
Indidan artt. wos mainifested in geometrical  
ornamente,, row colois,, and crude  
representations off ornate forms..

Initial Letter Al Harige Letter,,  
unornamenteed or dierortive ly dierigined,,  
used to mark thie begininig off a  
chapter,, an important change in thie  
text,, or to dierortie a single mors off  
typie..

Japaneise ((Diersiggn)) Oeriwied firmom thie  
Chinesie and usual ly commericilized in  
its popllicartion.. Off chieff intererst to  
puriters in thie ornamenteed and  
undiering off word-black prints..

Mohometans Followers off thie Principht.  
Mohomet,, includinig Alabian,, Indidan,,  
Morissh,, Persian,, and other nortons..  
Mors Dine off thie main portions off a  
diersiggn,, readily distinguisheid and  
hewinig some unity in itself,, yet  
maininig in prapier melortionship to  
thie whole scheme..

Mortierials off Diersiggn Morsers,, dots,, and  
lines which compose thie complete dieriggn..

Mort.iff Thie or'igginial shou'nce f'ior is  
 die'or'ort i'wie sich'emie or' e'le'ment ..  
 Mortu'rial f'ormis Mort.iffs or' d'ies'igini ch'ors'eini  
 f'riom in'ortu'rie,, e'it'h'ier in'ini'mortie or'  
 in'ini'mortie ..  
 Mortu'rial is'tic: ((D'ies'igini)) Thie d'ie'ment  
 i'ni'tort'oin or' f'ormis t'olk'eini f'riom in'ortu'rie,,  
 m'et'oi'ini'ing is' m'uch is' p'oss'ible or' th'ie'ir  
 or'igginial sh'apie,, d'ol'oir,, e'tic ..  
 Opt'ical Ill'us'ion An' e'rr'oir,, in'ormal t'oi  
 th'ie or'we'iege' e'ye,, in th'ie p'ec'iept'oin or'  
 e'ert'oi'ni l'ines,, in'ig'ies,, in'id' sp'aces ..  
 Re'or'iginiz'ed by th'ie d'ies'igine'rs or' t'y'p'e  
 in'id' or' t'y'p'o'ig'raph'y ..  
 Or'nam'ent: Sim'ilar t'oi die'or'ort'oin ..  
 P'ec'iept'oin ((Art)) Or'we'ie'd by th'ie p'ec'ie'd  
 f'riom in'id'ort: 'S'is'ol'ol'.. t'oi '3'3'ol'ol'ol' ..  
 D'ie'ri'we'd f'riom Als'ig'ini in'id'ort, in'id'ort is't'oin'ig'ly  
 in'f'lu'ie'ie'd by th'ie G'ie'ek ..  
 P'oin't or' D'ol'oin'ic: Thie p'oin't,,  
 in'id'ic'ort'e'd in th'ie f'ini'sh'ie'd d'ies'igini,,  
 up'oin w'h'ich th'ie w'or'ious or't'f'orm'e't'ions or'  
 th'ie d'ies'igini or'ie b'ol'oin'ie'd in d'ip'p'e'or'oin'ic ..  
 P'rop'ort'oin Thie c'om'p'ort'owie  
 m'ort'oin'sh'ip b'e'tw'e'ni th'ie w'or'ious  
 e'le'ments in d'ies'igini ..  
¶ P'ig '7'1 ¶ Re'no'iss'oin'ic: Thie p'ec'ie'd or' in'id'ort  
 or't'w'it'y in th'ie 14'th in'id' 15'th  
 c'ent'ur'ies in It'ol'y .. An' in'id' or' th'ie  
 c'lass'ic or't's in'id'ort, d'ie'el'op'e'd in'id'  
 in'id'ic'ie'd b'e'g'in'id' f'orm'e' h'ie'ig'ht's ..  
 R'h'y'th'm M'or'e'm'ent,, ch'ar'act'e'iz'ed by th'ie  
 m'eg'ul'ar m'e'as'ur'm'ent or' or'ie'nt' or'  
 in'id'ort'oin ..  
 R'om'ain ((D'ies'igini)) An' t'rain's'p'ol'oin't'e'd  
 d'ie'el'op'm'ent or' G'ie'ek d'ies'igini,,  
 in'f'lu'ie'ie'd by R'om'ain h'ab'its in'id'  
 ch'ar'act'e'r .. M'ore m'et'ois'tic in th'ie  
 t'ime't'm'ent or' in'ortu'rial f'ormis th'oin th'ie  
 G'ie'ek ..  
 Sh'apie Thie c'ont'our or' d'ip'p'e'or'oin'ic or' in'id'  
 or'ie'd ..



Sicciandii inawiiain ((Diersigini)) Thiaht. ooff thie  
 inoortiiainis Dienimioirk „ Nioimioiy „ ainid Siueidien „  
 ichioioioctieimiziedl ibiy iniochi inntieir loioeimeinnts „  
 ainid imioiny (sigimbioiic) idierwicies „  
 Sigimbioiic: Tyypii fiiy iinigy ooir iniepiersieinrt iinigy thie  
 idieia ooir puirprieie ooff oi idiersigini „  
 Sigimiertiiny Riegiul ooir ainioinogieimeinrt. ooff pioirtis  
 oioiois: oi giwiein ooxis „ (so) thiaht. oi  
 diwisiioini thioioinghi thiaht. ooxis wiil giwie  
 siimil ooir thioiwes „  
 Thioie Thie oimioinrt. ((inoort k iinid)) ooff Iigihrt.  
 inefliectied firoim oi giwiein siueioie oi  
 Iigihrt. thioie ooir oioirk in thioie „  
 Woiuieritig Ain inntieimioxtuioie ooff ielleimeinnts in  
 oi idiersigini diifereinrt. in firoim ooir oioioir  
 ainid inoort ainioinogieid sigimiertiioioil iy „

## [ P i g i ]

TYPIOTGIRAIPIHIIC: THECHINIICAIL. 'SEIR'IE'S

FIOIR: AIPPIRIEINRTICIES

Thie fiolliowing list ooff puibliioartioinis „  
 oompiis iinigy thie Tyypioigirioiphiic Thechiniioil  
 Seiries fioir Aippireinrticies „ Ihois bieein  
 pioiepioiried uinidieir thie suipierwisioini ooff thie  
 Oommiittieie oin Eidiuoartioini ooff thie Uinittiedl  
 Tyypiothietioie ooff Ainieioio fioir iusie in thioie  
 oioisies „ in oioioisie ooff pioinrtiiny  
 inistiuoictioini „ ainid ibiy inidiiwidiuol „  
 Eiochi puibliioartioini Ihois bieein oompiiledl ibiy  
 oi oompiertieinrt. oioithioir ooir giroioip ooff  
 oioithioirs „ ainid oioirfiuiliy ieditied „ thie  
 puirprieie bieinig to pioioi die thie pioinrtieirs  
 ooff thie Uinittiedl Sitorties reimioioyers „  
 giroimieyimein „ ainid oippireinrticies wiith oi

[illegible]

Each topic is treated in a concise manner, the aim being to embody in each publication as completely as possible all the rudimentary and important and essential facts necessary to an understanding of the subject. Care has been taken to make all statements accurate and clear, with the purpose of bringing essential information within the understanding of beginners in the difficult fields of study. Wherever possible, simple and well-defined drawings and illustrations have been used to assist in giving additional explanations to the text.

In order that the pamphlets may be of the greatest possible help for use in teacher-education classes and for self-instruction, each title is accompanied by a list of Review Questions covering essential items of the subject matter. A short Glossary of technical terms belonging to the subject or prominently treated is also added to many of the books.



710) interview questions: „ (glossary) ..

5. Pirovoff PierssiesDiy IA.. IA.. 'Stelwairt.IA  
pirimier off infformat.iain abiaut. the  
cursdomairy methoids and machiniers 'four  
talk inig pirintiers: pirovoffs.. 410 pip) ..  
i l l u s t r a t e d .. 411 interview questions: „  
(glossary) ..

6. Pliartein Pirint.inig PierssiesDiy Diainiel  
DalkierIA pirimier off infformat.iain meigard.inig  
the history and machinical  
consitruict.iain off pliartein pirint.inig  
pierssies, 'from the orig.inal hand pierss:  
to the modern job pierss, 'to which is  
added a chapter on automat.ic pierssies  
off small size.. 51 pip) .. i l l u s t r a t e d .. 419  
interview questions: „ (glossary) ..

7. Cyli inidier Pirint.inig PierssiesDiy Hembiernt.  
L.. DalkierDie.inig a study off the machinies  
and operat.iain off the pirint.iyal types  
off cyli inidier pirint.inig machiniers.. 64 pip) ..  
i l l u s t r a t e d .. 417 interview questions: „  
(glossary) ..

8. Machinical Fieldiers and FoldiersDiy  
Wiliam E.. 'SpurrierThe history and  
operat.iain off modern field.inig and  
fold.inig machiniers: with hints on their  
care and adjus.tments.. i l l u s t r a t e d ..  
interview questions: „ (glossary) ..

9. Power 'for Machinieriy in Pirint.inig  
HoursiesDiy Carl F.. 'Scottt.IA treatise on  
the methods off applying power to  
pirint.inig pierssies and allied machinieriy  
with point.icular meffieries to electric  
drive.. 53 pip) .. i l l u s t r a t e d .. 619 interview



irreppirordirict.t.i.oini: „ t.h.i.inigsi: t.oi iriemienibier' wilhiein  
oiridier iinig ienigirorw iinigi: „ I l l uisitirortieid: „  
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1'5: „ IE l ierictirortiyip i inig i oinid 'Sitierierortiyip i inig i Oiy  
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irerw ierw iquiersit.t.i.oinis: „ (g l ois:siariries: ..

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Hioinid bioalk' f'oir' biegi i inieris: „ (g i w i inig)  
i inffoirimort.t.i.oini oibioirt. „ jjuisit. i ffij i inig: „ i spioic i inig: „  
coiririerict.t.i.inig: „ oinid oit.hier' imort.t.ieris: irie l oit. i inig  
t.oi t.uyipiersiet.t.i.inig: „ I l l uisitirortieid: „ irerw ierw  
iquiersit.t.i.oinis: „ (g l ois:siaririj) ..

1'7: „ Piri in t.ieris: i Piri oirf's i Oiy iA: „ iA: „  
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imoidie: „ imoirkieid: „ oinid coiririerict.tieid: „ witthi  
oibserirwort.t.i.oinis oin pirioirfirieroid i inig: „  
I l l uisitirortieid: „ irerw ierw iquiersit.t.i.oinis: „  
(g l ois:siaririj) ..

1'8: „ F i i r'sit. 'Sitierips: i in iJoib i Oioimpors i t.t.i.oini Oiy  
i Oioim i l l i e i Oie'Wier:zie:Siungigiersit.t.i.oinis: f'oir' t.hie  
oipipirierit i cie i oioimpors i t.oir' i in i siet.t.i.inig i h i s:  
f i i r'sit. „ jjoibis: „ i esipieric i o i l l y oibioirt. t.hie  
i impioirt.oinit. I i t.t.lie t.h i i n i g s i wilhiechi (g o t.oi  
ioalkie i goioid i d i s p i l o y i i n t.uyipioirg i r o i p i h i y i .. i G i 3  
pipi: „ i e x o i m p i l i e s: „ 'S i S i r e r w i e r w i q u i e r s i t . t . i . o i n i s : „  
(g l ois:siaririj) ..

1'9: „ i G i e n i e r o l i J o i b i O i o m p o r s i t . t . i . o i n i H o i w t . h i e j j o i b i  
o i o m p o r s i t . o i r i H o i n i d i e s i b u s i i n i e s i s  
s i t . o i t . i . o i n i e r i y i .. p i r o g i r o i m i s i o i n i d i m i s i c i e l i o i n i e o i u s

uicorik .. I l l u s t r a t i o n e d , i n t e r v i e w q u e s t i o n s ,  
g l o s s a r y ..

2'0 .. D i o r k C o m p r o s s i t t i o n D y J . . W .  
D i o r k i l l C h a p t e r s : f r o m D e W i n n i e s  
M o d e r n M e t h o d s o f D i o r k C o m p r o s s i t t i o n ,  
i n t e r v i e w a n d i n t e r v i e w f o r t h i s s e r i e s  
o f t e x t - b o o k s b y J . . W . D i o r k i l l o f T h e  
D e W i n n i e P r e s s , N e w Y o r k . P a r t I :  
C o m p r o s s i t t i o n o f p r o g r e s s . P a r t I I :  
I m p r o s s i t t i o n o f p r o g r e s s . ( 2 ' 2 ' 9 ) p p .  
i l l u s t r a t i o n e d , i n t e r v i e w q u e s t i o n s ,  
g l o s s a r y ..

2'1 .. T r a b u l a t i o n C o m p r o s s i t t i o n D y R o b e r t .  
S e n a r e m a i s t u d y o f t h e r e l e m e n t a r y f o r m s  
o f t r a b u l a t i o n c o m p r o s s i t t i o n , w i t h e x a m p l e s o f  
m o r e d i f f i c u l t c o m p r o s s i t t i o n . 3 1 6 p p .  
e x a m p l e s , 4 1 5 i n t e r v i e w q u e s t i o n s ..

2'2 .. A p p l i e d A r i t h m e t i c D y E . . E .  
S i e l d i n E l e m e n t a r y a r i t h m e t i c a p p l i e d  
t o p r o b l e m s o f t h e p r i n t i n g t r a d e ,  
c o l l a t i o n o f m a t e r i a l s , p r o p e r  
w e i g h t s a n d s i z e s , w i t h s t a n d a r d  
t a b l e s a n d m u l t i p l i c a t i o n c o m p u t a t i o n , r e a d i n g  
s u b j e c t c o m p l i e d w i t h e x a m p l e s a n d  
e x e r c i s e s . 1 5 9 p p .

2'3 .. T y p e c o s t i n g a n d C o m p r o s s i n g  
M a c h i n e s . . W . F i n l a y , E d i t o r S e c t i o n  
I T h e L i n o t y p e D y L . . A .  
H o r n s t e i n S e c t i o n I I T h e M o n o t y p e D y  
J o s e p h H a y s S e c t i o n I I I T h e I n t e r t y p e D y  
H e n r y W . C o z z e n s S e c t i o n I W O t h e r  
T y p e c o s t i n g a n d T y p e s e t t i n g M a c h i n e s D y  
F r a n k H . S m i t h A b r i e f H i s t o r y o f  
t y p e s e t t i n g m a c h i n e s , w i t h  
d e s c r i p t i o n s o f t h e i r m e c h a n i c a l  
p r i n c i p l e s a n d o p e r a t i o n s ..

I l l u s t r i e r t e d „ i n e w i e w i q u e s t i o n s „  
( g l o s s i a r y ) .

### [ P i g . i v ]

P A I R T I I I I m p r o s i t t i o n i o n i d i S t o n i e w o r k  
( 2 4 ) . L o c k i n g f o r m s f o r t h e J o b P r e s s i n g  
F i r m i n k S . H e n r y T h i n g s t h e a p p r e n t i c e  
s h o u l d k n o w a b o u t . L o c k i n g u p s i m i l  
f o r m s „ a n d a b o u t g e n e r a l w o r k o n t h e  
s t o n e . I l l u s t r i e r t e d „ i n e w i e w i q u e s t i o n s „  
( g l o s s i a r y ) .

( 2 5 ) . P r e p a r i n g f o r m s f o r t h e C y l i n d r i c  
P r e s s i n g F i r m i n k S . H e n r y P r o m p t l e t . a n d  
c o n t a i n g i m p r o s i t t i o n „ m a r g i n s „ f o l d  
m a r k s „ e t c . . M e t h o d s o f h o n o r i n g t y p e  
f o r m s a n d e l e c t r o t y p e f o r m s .  
I l l u s t r i e r t e d „ i n e w i e w i q u e s t i o n s „  
( g l o s s i a r y ) .

### P A I R T I W P r e s s w o r k

( 2 6 ) . M a k i n g R e a d y o n P l a t e n P r e s s e s i n g  
T . G . M a G i r e w T h e e s s e n t i a l p a r t s o f a  
p r e s s a n d t h e i r f u n c t i o n s „ d i s t i n c t i v e  
f e a t u r e s o f c o m m o n l y u s e d m a c h i n e s .  
P r e p a r i n g t h e t y p e s e t , r e g u l a r t h e  
i m p r e s s i o n „ u n d e r l a y i n g a n d  
o w e r l a y i n g „ s e t t i n g g a u g e s „ a n d o t h e r  
d e t a i l s e x p l a i n e d . I l l u s t r i e r t e d „ i n e w i e w i  
q u e s t i o n s „ ( g l o s s i a r y ) .

( 2 7 ) . C y l i n d r i c P r e s s w o r k O i l T . G .  
M a G i r e w P r e p a r i n g t h e p r e s s „ a d j u s t m e n t  
o f b e d a n d c y l i n d r i c „ f o r m r o l l e r s „ i n k  
f o u n t a i n „ g r i p p e r s a n d d e l i v e r y  
s y s t e m s . U n d e r l a y i n g a n d o w e r l a y i n g „  
m i d d l e m i n o w e r l a y m e t h o d s . I l l u s t r i e r t e d „  
i n e w i e w i q u e s t i o n s „ ( g l o s s i a r y ) .



2'8) .. P'ri:es:sirio:om Hi:ni:t:s i:ni:di Hi:l p'si:Oiy  
C'hioir l'ies: L... O:u:ni:t.i:ni:Oie:sir i:bi:ni:gi 'sio:me  
p'ri:oc:t.i:ci:l i:me:t'hio:di:s off p'ri:es:sirio:om wio:rik „  
wi:t'hi di:ir'eic:t.i:oi:is i:ni:di u:sie'fi:l i:ni'foirni:art.i:oi:  
me:l'art.i:ni:gi 't'o: o: wio:ri'eit'y off p'ri:ni:t.i:ni:gi-  
p'ri:es:s: p'ri:ob l'ie:is:.. 18'7' pip:.. „ 17'6' riew i:ew  
q'uie:s't.i:oi:is:..

2'9) .. R'e:p'ri:odiu:c't i:wie P'ri:oc:ies:sies: off 't'hie:  
G'ri:opihi:c A'i:r't:s:Oiy A:l.. W... E:l'sio:ni:A p'ri:imie:r off  
i:ni'foirni:art.i:oi: o:bi:u:rt. 't'hie: di'st'i:ni:c't i:wie  
f'ie:art'u:rie:s off 't'hie: me:l i:ef „ 't'hie: i:ni'to:gi:l i:oi „  
i:ni:di 't'hie: p'i:oi:ni:gi:ri:opihi:c p'ri:oc:ies:sies: off  
p'ri:ni:t.i:ni:gi.. 18'4' pip:.. „ i:l l'u:s't'i:art'ied „ 18'10'  
riew i:ew q'uie:s't.i:oi:is: „ (g'l'o:s'sio:ri:y) ..

P'AI'R:T 'W' P'ri:opihi:l'et. i:ni:di O:io:olk O:i:ni:di:ni:gi  
3'0) .. P'ri:opihi:l'et. O:i:ni:di:ni:gi Oiy O:io:icir'off't. L...  
O:io:odwi:ni:A p'ri:imie:r off i:ni'foirni:art.i:oi: o:bi:u:rt.  
't'hie: wio:ri:ous o:p'ie:art.i:oi:is i:em'p'l'o:ied i:ni  
bi:ni:di:ni:gi p'ri:opihi:l'et:s i:ni:di o't'hie:r wio:rik i:ni  
't'hie: bi:ni:di:ni:gi.. I:l l'u:s't'i:art'ied „ riew i:ew  
q'uie:s't.i:oi:is: „ (g'l'o:s'sio:ri:y) ..

3'1) .. O:io:olk O:i:ni:di:ni:gi Oiy 'Jio:hi:ni 'J...  
P'l'e:gi:e:r P'ri:oc:t.i:ci:l i:ni'foirni:art.i:oi: o:bi:u:rt. 't'hie:  
u:sio:al o:p'ie:art.i:oi:is i:ni bi:ni:di:ni:gi bi:oi:olk:s „  
f'oi:l di:ni:gi „ g'o:t'hie:r i:ni:gi „ ci:l l'art.i:ni:gi „ s'ie:w i:ni:gi „  
f'oi:r wio:ri:di:ni:gi „ f'i:ni:si:hi:ni:gi.. O:io:sie: i:oi:olk i:ni:gi i:ni:di  
c'o:s'ied:- i:ni bi:oi:olk:s.. Hi:ni:di wio:rik i:ni:di i:oi:chi:ni:ie:  
wio:rik .. 'Jio:bi i:ni:di bi:oi:olk -bi:oi:olk bi:ni:di:ni:gi..  
I:l l'u:s't'i:art'ied „ riew i:ew q'uie:s't.i:oi:is: „  
(g'l'o:s'sio:ri:y) ..

P'AI'R:T 'W' I' C'h'i:me:c't. L'i't'e:ri:oi:ri:y C'h'i:mp'o:s'i't.i:oi:  
3'2) .. Wio:ri:di 'S't'u:di:y i:ni:di E:ni:gi:l i:si:hi G'ri:om'mio:ri:Oiy  
F... W... Hi:oi:i'l't'io:ni:A p'ri:imie:r off i:ni'foirni:art.i:oi: o:  
bi:u:rt. wio:ri:di:s „ 't'hie: i:er me:l'art.i:oi:is: „ i:ni:di

‘t.hie iir’ uisies:.. (G) pipi.. ” (B) iiew iiew  
iquies’t.i ioinis:.. (g) l ois:soir’iy) ..

3(3) .. Piuinict’uortt.i ioiniDiy IF .. lwl .. Hloimii l’t.oiniA  
pir’iimeir’ off’ iinffoimio’tt.i ioini oibiourt. ‘t.hie imoir’ks  
off’ piuinict’uortt.i ioini ioinid ‘t.hie iir’ uisie:.. ibio’t.hi  
giri’oimio’tt.i i oal liy) ioinid ‘t.yipioigiri’oipih i i oal liy) .. ‘SiG  
pipi.. ” ‘Si9) iiew iiew iquies’t.i ioinis:.. (g) l ois:soir’iy) ..

#### [(Pig) w]

3(4) .. ‘Cioip i’t.oal:siDiy IF .. lwl .. Hloimii l’t.oiniA pir’iimeir’  
off’ iinffoimio’tt.i ioini oibiourt. cioip i’t.oal iizortt.i ioini ..  
wi’tt.hi :soimie pir’ioctt.i i oal ‘t.yipioigiri’oipih i i oal h i i n i t s  
ois: t.oal ‘t.hie uisie off’ cioip i’t.oal:si .. ‘4(8) pipi.. ” ‘9(2)  
iiew iiew iquies’t.i ioinis:.. (g) l ois:soir’iy) ..

3(5) .. ‘Oiiw i:si ioini off’ l’hoiridsiDiy IF .. lwl ..  
Hloimii l’t.oiniRui iers: ffoir’ ‘t.hie diiw i:si ioini off’  
l’hoirids: oit. ‘t.hie ienids: off’ l i i n i e r s : .. wi’tt.hi  
iieimioir’ks ioini :sipie l l i i n i g : .. :siy l l oib i i c i o r t t . i i o i n i i o i n i d  
pir’ioimioinict’ioit i i o i n i .. ‘4(2) pipi.. ” ‘7(8) iiew iiew  
iquies’t.i ioinis: ..

3(6) .. ‘Cioimpioiuinid l’hoiridsiDiy IF .. lwl .. Hloimii l’t.oiniA  
st’uoidiy off’ ‘t.hie pir’iioct’i p i e r s : off’  
cioimpioiuinid i i n i g : .. ‘t.hie cioimpioinienit’s off’  
cioimpioiuinids: .. ioinid ‘t.hie uisie off’ ‘t.hie ihy’ipihieiri ..  
3(4) pipi.. ” ‘G(2) iiew iiew iquies’t.i ioinis: ..

3(7) .. ‘Albibiriew iioit i i o i n i s : i o i n i d ‘S i i g i n i s i D i y I F .. l w l ..  
Hloimii l’t.oiniA pir’iimeir’ off’ iinffoimio’tt.i ioini oibiourt.  
albibiriew iioit i i o i n i s : i o i n i d : s i i g i n i s : .. wi’tt.hi  
c l o i s : s i f f i e n d l i i s t t s : o f f ‘t . h i o s i e : i n i i m o i s t .  
cioimioin uisie:.. ‘Si8) pipi.. ” ‘3(2) iiew iiew  
iquies’t.i ioinis: ..

3(8) .. ‘Thie Uisies off’ I’t.oal i i c i D i y I F .. l w l ..  
Hloimii l’t.oiniA pir’iimeir’ off’ iinffoimio’tt.i ioini oibiourt.  
‘t.hie ih i s t i o i r i y i o i n i d u s i e s : o f f i t . o a l i i c :

Lettert.eirnis.. 311 pipi.. „ 317 riewiiewi quiesst.iionis..

319.. PirmooffireoidiinigiOiy. Airinoidi Liewi'thois:Thie  
t.eichiniicai pihosiers off thie pirmooffireoidieir is  
uoirik „ riewoidiinigi „ uoirik iinig „ riewiis.iinig „  
etic.. „ mietthoids off ihainidliinig pirmoffs ioinid  
capiy.. I l l u s t r i o t t e d b y e x a m p l e s .. 319 pipi.. „  
1619 riewiiewi quiesst.iionis „ g l o s s a r y ..

410.. Piriepiarott.ioini off Piriiint.eirnis CapiyOiy. IF..  
W.. Haimi i l t o i n i s u i g g i e s t . i o n i s f o i r o u t h o i r s „  
e d i t t o i r s „ o i n i d a l l w i t h o u r e e n g i g g e d i n  
p i r i e p i a r i i n i g c a p i y f o r t h i e c o m p o s i i n i g r i o o m ..  
316 pipi.. „ 1617 riewiiewi quiesst.iionis..

411.. Piriiint.eirnis Moiniuidi off S'ty l i e A  
m e f f e r m e i n i c e c o m p i i l o t t . i o i n i o f f a p p i r o w e d  
m u l t e r s „ u s i g g i e s „ o i n i d s u i g g i e s t . i o n i s  
m e l o t t . i n i g t o u i n i f f o i r m i t t y i n p i u n i c t u o t t . i o i n i „  
c a p i i t t o l i z o t t . i o i n i „ a l b i r m e w i o t t . i o n i s „  
m u m e r i a l s „ o i n i d k i i n d i r e d f f e a t u r e s o f f  
c o m p o s i t t . i o i n i ..

412.. Thie Piriiint.eirnis O i c t . i o i n i a r y O i y I A .. I A ..  
S t e u a r t t A h a i n i d b i o l k o f f d i e f f i n i t t . i o n i s o i n i d  
m i s i c e l l o i n e o u s i n f o r m o t t . i o i n a l b o u r t  
w o i r i o u s p i r o c e s s i e s o f f p i r i n t . i n i g „  
a l p h a b e t . i c a l l y o i r r o i n g e d .. T e i c h i n i c a l  
t e i r n i s e x p l o i n e d .. I l l u s t r i o t t e d ..

P A I R T W I I O e r s i g i n i „ C o l o r „ o i n i d L e t t . t e i r i n i g

413.. A p p l i e d O e r s i g i n i f o r P i r i n t . e i r n i s O i y  
H a i r y L .. G a g e A h a i n i d b i o l k o f f t h i e  
p r i n c i p l e s o f o i r r o i n g e m e i n t „ w i t h b r i e f  
c o m m e n t o n t h i e p e r i o d s o f d i e s i g n w i t c h  
h a r w e m o s t i n f l u e n c e d p i r i n t . i n i g .. T i e r o t s  
o f h a i r m i n i g „ b a l o n i c e „ p r o p r i e t t . i o i n i „ o i n i d  
r i h y t h i m „ m o t t . i o i n i „ s y m m e t r i g o i n i d w o i r i e t y „

oimimieint,, iesthieitid: oinid siyimibolidid.. 37  
i l l u s t r i a t i o n s : 416 r i e w i e w q u i e r s t i o n s :  
g l o s s a r y : b i b l i o g r a p h y .

441. E l e m e n t s o f T y p o g r a p h y : D e s i g n i n g  
H a r m y L . G a g e R i p p l i c a t i o n s o f t h e  
p r i n c i p l e s o f d e c o r a t i v e d e s i g n .  
O u i d i d i n g m a t t e r i a l o f t y p o g r a p h y :  
p a p e r , t y p e s , i n k , d e c o r a t i o n s o n d  
i l l u s t r a t i o n s . H a n d l i n g o f s h a p e s :  
D e s i g n o f c o m p l e t e b o o k , t r a c t i n g e a c h  
p a r t . D e s i g n o f c o m m e r c i a l f o r m s o n d  
s i n g l e u n i t s . I l l u s t r a t i o n s , r e w i e w  
q u e r s t i o n s , g l o s s a r y , b i b l i o g r a p h y .

#### T y p o g r a p h y

451. R u d i m e n t s o f C o l o r i n P r i n t i n g  
H a r m y L . G a g e U s e o f c o l o r : f o r  
d e c o r a t i o n o f b o o k o n d w i t h e , f o r  
b r o a d p r o s t e r e f f e c t , i n c o m b i n a t i o n s  
o f t w o , t h r e e , o r m o r e p r i n t i n g s w i t h  
p r o c e s s e s e n g i n e e r i n g . S e l e c t i f f i c m a t t e r i a l  
o f c o l o r , p h y s i c a l o n d c h e m i c a l . T e r m s  
i n w i c h c o l o r m a y b e d i s c u s s e d : l i g h t ,  
w a t e r , i n t e n s i t y . D i f f e r e n c e s i n c o l o r ,  
s a t u r a t i o n o n d c o m b i n a t i o n s . C o l o r t h e o r y  
o f p r o c e s s e s e n g i n e e r i n g . E x p e r i m e n t s w i t h  
c o l o r . I l l u s t r a t i o n s i n f u l l c o l o r ,  
o n d o n w a r m o r p a p e r s . R e w i e w  
q u e r s t i o n s , g l o s s a r y , b i b l i o g r a p h y .

461. L e t t e r i n g i n T y p o g r a p h y H a r m y L .  
G a g e P r i n t e r s u s e o f l e t t e r i n g :  
a d a p t a b i l i t y o n d d e c o r a t i v e e f f e c t .  
D e w l o p m e n t o f h i s t o r i c w r i t i n g o n d  
l e t t e r i n g o n d i t s i n f l u e n c e o n t y p e  
d e s i g n . C l a s s i f i c a t i o n o f g e n e r a l  
f o r m s i n l e t t e r i n g . R i p p l i c a t i o n o f  
d e s i g n t o l e t t e r i n g . D i r e c t i n g f o r  
m e p r o d u c t i o n . F u l l y i l l u s t r a t e d .

irreviiew quierst.i oins: „ g l o s s a r y „  
b i b l i o g r a p h y ..

417.. T y p o g r a p h i c : D e s i g n i n g  
A d w e i r t . i s i n g l i s h : H o m e L . . G o g e t h e  
p r i n t e r ' s f u n c t i o n i n a d w e i r t . i s i n g .  
P r i n t e r ' s u p o n i w i t h i c h a d w e i r t . i s i n g i s  
b o a r d . P r i n t e r ' s o n o l y i s o f f h i s c o p y .  
E m p h a s i s : „ I e g i b i l i t y „ o t t e n t . i o n .  
c o l o r . M e t h o d o f s t u d y i n g a d w e i r t . i s i n g  
t y p o g r a p h y . I l l u s t r a t . i o n s : „ i r r e v i e w  
q u i e r s t . i o n s : „ g l o s s a r y „ b i b l i o g r a p h y ..

418.. M a k i n g D u m m i e s o n d L a y o u t : S i g n e d H o m e L . .  
G o g e t h e L a y o u t : t h e o r i c h i t e r t u r a l  
p l a n . A d u m m i g : t h e i m i t a t . i o n o f a  
p r o p o s e d f i n a l e f f e c t . U s e o f d u m m i g i n  
s o l e r s w o r k . U s e o f L a y o u t . F u n c t i o n o f  
L a y o u t m a n . D i n d i n g s i c h e m e r s f o r  
d u m m i e s . D u m m i g e n w e l p e r s .  
I l l u s t r a t . i o n s : „ i r r e v i e w q u i e r s t . i o n s : „  
g l o s s a r y „ b i b l i o g r a p h y ..

P A I R T W I I I H i s t o r y o f P r i n t i n g

419.. D i o l k s D e f o r m e T y p o g r a p h y D i g I F . . W .  
H o m i l t o n A p r i m e r o f i n f o r m a t . i o n a b o u t  
t h e i n w e i r t . i o n o f t h e o l p h a b e r t o n d t h e  
h i s t o r y o f b o o k m a k i n g u p t o t h e  
i n w e i r t . i o n o f m o v a b l e t y p e s . G 2 p p . .  
i l l u s t r a t e d „ G 4 i r r e v i e w q u i e r s t . i o n s .

510.. T h e I n w e i r t . i o n o f T y p o g r a p h y D i g I F . .  
W . H o m i l t o n A b r i e f s k e t c h o f t h e  
i n w e i r t . i o n o f p r i n t i n g o n d h o w i t c o m e  
a b o u t . G 4 p p . . G 2 i r r e v i e w q u i e r s t . i o n s .

511.. H i s t o r y o f P r i n t i n g P a r t . I D i g I F . . W .  
H o m i l t o n A p r i m e r o f i n f o r m a t . i o n a b o u t

thie biegiininiginis off pirinintinig,, thie dieweioipimeint off thie biobok,, thie dieweioipimeint off pirintieris moitieriois,, and thie woirk off thie gmerott pioinieris.. (G3) pip.. " '55' riewiewu quierstionis..

'52.. Hiestoiry off Pirinintinig Poirt. I IDig IF.. W.. HaimiitoiniA birierf sikertich off thie exoinoinic: coidititionis off thie pirinintinig inidustiriy ffrom 14'50 to 17'89,, inidindinig growerimeint megiuortionis,, cenisoirsihip,, inierinaI coidititionis and inidustirial meortionis.. '94 pip.. " 1'2'8' riewiewu quierstionis..

'53.. Pirinintinig in EinglaidDig IF.. W.. HaimiitoiniA shiort. Hiestoiry off pirinintinig in Einglaid ffrom Cioxtoin to thie piersieint. timie.. (8'9) pip.. " 'G'5' riewiewu quierstionis..

'54.. Pirinintinig in AlmericoidDig IF.. W.. HaimiitoiniA birierf sikertich off thie dieweioipimeint off thie newspapier,, and soime moites on puiblisieris wio hawie espiciaIly cointributed to pirinintinig.. '98 pip.. " '8'4' riewiewu quierstionis..

'55.. Typpie and Priesiers in AlmericoidDig IF.. W.. HaimiitoiniA birierf Hiestoiricai sikertich off thie dieweioipimeint off typpie cirstinig and priesis buiididinig in thie Unitted Stortes.. '5'2' pip.. " 'G1' riewiewu quierstionis..

## PIg wii i

PIRIT IX Cirst Findinig and Aicouintinig  
'56.. Elements off Cirst in PirinintinigDig  
Heinry P.. PoirtierThie Staindard Cirst:-  
Findinig Firms and thier rursis.. Wioit.

thiey shouid shou.. Hou to utt.ii izie thie  
informati.oin thiey giwie.. Riewiew  
quiesst.i.oinis.. (G)oissoary..

'57'.. Uise off a Clost. (Sigssteim)g Hienry IP..  
PoinTierThie (S.oinid.oin) Clost.-F inid.ing (F.oinis  
oinid thieir uises).. Wihort thiey shouid shou..  
Hou to utt.ii izie thie informati.oin thiey  
giwie.. Riewiew quiesst.i.oinis.. (G)oissoary..

'58'.. Thie PoinTier as a Hienry (Sigssteim)g Hienry  
IP.. PoinTierThie sell.ction oind puichase off  
materi.ials oind suppliers for print.ing..  
Thie relat.ion off thie clost. off raw  
materi.ial oind thie sell.ing price off thie  
fin.isherd produkt.. Riewiew quiesst.i.oinis..  
(G)oissoary..

'59'.. F.undam.ental P.inciples off  
Est.imate.ing (Sigssteim)g Hienry IP.. PoinTierThie  
est.imate.oin oind his work.. f.oinis to uise  
gen.eral rules for est.imate.ing.. Riewiew  
quiesst.i.oinis.. (G)oissoary..

G6'.. Est.imate.ing oind Sell.ing (Sigssteim)g Hienry IP..  
PoinTierAn insiglit into thie meth.ods uised  
in mak.ing est.imates.. oind thieir  
relat.ion to sell.ing.. Riewiew quiesst.i.oinis..  
(G)oissoary..

G1'.. Accoun.ing for PoinTier's (Sigssteim)g Hienry IP..  
PoinTierA brief out.ine off a. accoun.ing  
sigssteim for p.ointers.. in.erssoary b.oids  
oind o.erssoary in.oids.. Riewiew  
quiesst.i.oinis.. (G)oissoary..

PART X: Miscellaneous

G2'.. H.alth.. 'Soin.ort.oin.. oind 'Saff.ety (Sigssteim)g

Henriqy P.. Prioritetliggierne in the pirintinig  
turidie,, is stuidiy off cionidit.i onis and cionid  
inew,, piricct.i cial siugigiesst.i onis ffor  
impirawemient,, piricct.i wie cippi i i onicis and  
mullers ffor isoffeti..

G3.. Tripiical Index:Oiy IF.. W.. Haimi i t.i onia  
biolok off ineffierencie cawerinig the tripiics  
tueortied in the Typpigriapihic Texthnicial  
Sieries,, is iphibeti i cial i y caweriged..

G4.. Cawersies off Stuidiy Oiy IF.. W.. Haimi i t.i onia  
gual diebiolok ffor t.i onicis,, with cawt.i i i  
and siugigiesst.i onis ffor c.i caweriged and siup  
uorik ..

## AIK:INDIWI:EDIGMIE:INT

This series off Typpigriapihic Text- bioloks  
is the result off the splendid co-  
operation off a large number off firms  
and individuals engaged in the  
pirintinig businies and its all iend  
industries in the Unitied States off  
Ameria..

The Committie on Educat.i on off the  
Unitied Typpothetice off Ameria,, under  
whose auspices the biolok is howe breen  
pripared and pub.i ished,, c.i caweriged  
its indelbt.i onis ffor the generous  
ass.i st.i onic reindemend by the many  
authois,, pirintiers,, and orthiers  
iedent.f fiend with this work..



Wihii llee dhuie oick inow lledigmeent. iis inoalie oin  
thie tittie oind oopigir iiglit. plogies off thioisie  
oointir i biurt iinig tlo iedich biolk „ thie  
Oomimittteie inewieirt thie lers: fiet. thort. o  
girnoup l iist. off oio-oopieirt iinig f iirms woiuid  
bie off intheiersit ..

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it. inid luiders oinly thioisie wihio hioie oio-  
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thie f iirst pir iint iinig .. Als siouin ois thie  
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Typpioigir ophiic: Teichinical 'Sier iers hiois breien  
oompiletie (wihich thie Oomimittteie hioiers  
wiill bie ort oin iedir ly idortie) „ thie fioll  
l iist. wiill bie pir iint ied iin iedich woiuime ..

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oick inow lledigie iits inid ielbt iediners: tlo thie  
oiniy siubisicir i biers: tlo thie 'Sier iers wihio  
hioie pirt i ient ly oioi i tieid iits  
pui b l i iort ioin ..

Oomimittteie oin ieduoirt ioin ..

Uin i tieid Typport hie tloie off Almer iia ..

Hieiriy P .. P iort ier .. O hio i i r i m i n ..

E .. L o i w i e n i c i e F i e l l ..

A .. M .. G l o s s i b i r i e n i e r ..

J .. O l y d i e O s w a l d ..

T o l b i y R u l b o w i t s ..

F i r e d e i r i c k W .. H o m i i t t o i n .. i e d u o r t i o i n

O i i r e c t o i r ..

[ P i g i i x ]

O O I N I T I R I O I U T I O I R S

Ffior Cioimipiois i t t i o i n i o n i d I E l e c t r i o t t y p e r s  
 I s i a n d H I D i o n i c h i o n d C i o m p i o n i y " N l e u W o i r k " I n I " Y " .  
 ' S I H I D u i m b i o n i k & C i o " " P h i i l o d i e I p h i i d " P o i .  
 J I " S I C h u s i h i i n i g & C i o " " I n o i r u o i o d " M l o s s i .  
 T h i e D i e W i n i n i e P i r e s s i " N l e u W o i r k " I n I " Y " .  
 R I " R I D i o n i n i e I l e y & S i o n i s C i o " " C i h i i c i o g i o " I I I .  
 G l e o " H I " E l I I i s C i o " " D i o s t o i n " M l o s s i .  
 E w a n s i - W i n t e r - H e l b i " D i e t r o i t " M l i c h .  
 F i r i o n i k I i n i P i r i n t t i n i g C i o m p i o n i y " P h i i l o d i e I p h i i d " P o i .  
 G a g g i e P i r i n t t i n i g C i o " " L t i d " " D a t t t i e C i r e e k " M l i c h .  
 F " H I " G i l l s o n C i o m p i o n i y " D i o s t o i n " M l o s s i .  
 S t e p h e i n G i r e e n e i & C i o " " P h i i l o d i e I p h i i d " P o i .  
 W i l l i a m G i r e e n " N l e u W o i r k " I n I " Y " .  
 W I " F " H a d I I P i r i n t t i n i g C i o " " C i h i i c i o g i o " I I I .  
 F i r i o n i k I D " W a d o l b s C i o " " P h i i l o d i e I p h i i d " P o i .  
 W i l l s o n I H I " L e e C i o " " N l e u H a w e i n " C i o n i n i .  
 J I " I D " L i p p i n i c i o t t C i o " " P h i i l o d i e I p h i i d " P o i .  
 M a i c C a l l a & C i o " " I n i c " " P h i i l o d i e I p h i i d " P o i .  
 T h i e P l o t t e r s o n P i r e s s i " N l e u W o i r k " .  
 T h i e P l i i m p t o n P i r e s s i " I n o i r u o i o d " M l o s s i .  
 P o o l i e D i r o s " " C i h i i c i o g i o " I I I .  
 R e i m i n i g t o n P i r i n t t i n i g C i o " " P i r o w i d e n i c i e " R I " I .  
 E d u o n d S t e i r n i & C i o " " P h i i l o d i e I p h i i d " P o i .  
 T h i e S t o n i e P i r i n t t i n i g & M l i f f " C i o " " R o d i n o l k e " W a .  
 S t a r t i e W a u r n a l C i o m p i o n i y " L i n i c i o l i n i " N l e b .  
 T h i e W i n i w e r s i t y P i r e s s i " C i o m b i r i d g i e " M l o s s i .  
 F f i o r C i o m p i o s i t t i o n i D i o s t o i n T y p o t h e r t o i e S i c h i o d l o f f P i r i n t t i n i g " D i o s t o i n " M l o s s i .  
 W i l l i a m F " F e l l C i o " " P h i i l o d i e I p h i i d " P o i .  
 T h i e K a l k h o f f C i o m p i o n i y " N l e u W o i r k " I n I " Y " .  
 O x f o r d - P i r i n t " D i o s t o i n " M l o s s i .  
 T o l b y R u b o w i t s " C i h i i c i o g i o " I I I .  
 E l e c t r i o t t y p e r s

Idiogramme in Diagrammen: (C) ... (C) ... (C) ...  
Folgende Schritte: (C) ... (C) ... (C) ...  
Yonik ... (C) ...  
(C) ... (C) ... (C) ... (C) ... (C) ...  
Richtig! (C) ... (C) ... (C) ...  
Poi ...  
H ... (C) ... (C) ... (C) ... (C) ...  
(P) ... (C) ...

Für die Einigung in der  
Amerikaner Typen (C) ... (C) ...  
M ...  
(C) ... (C) ... (C) ... (C) ...  
R ...  
G ... (C) ... (C) ... (C) ...  
M ...  
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