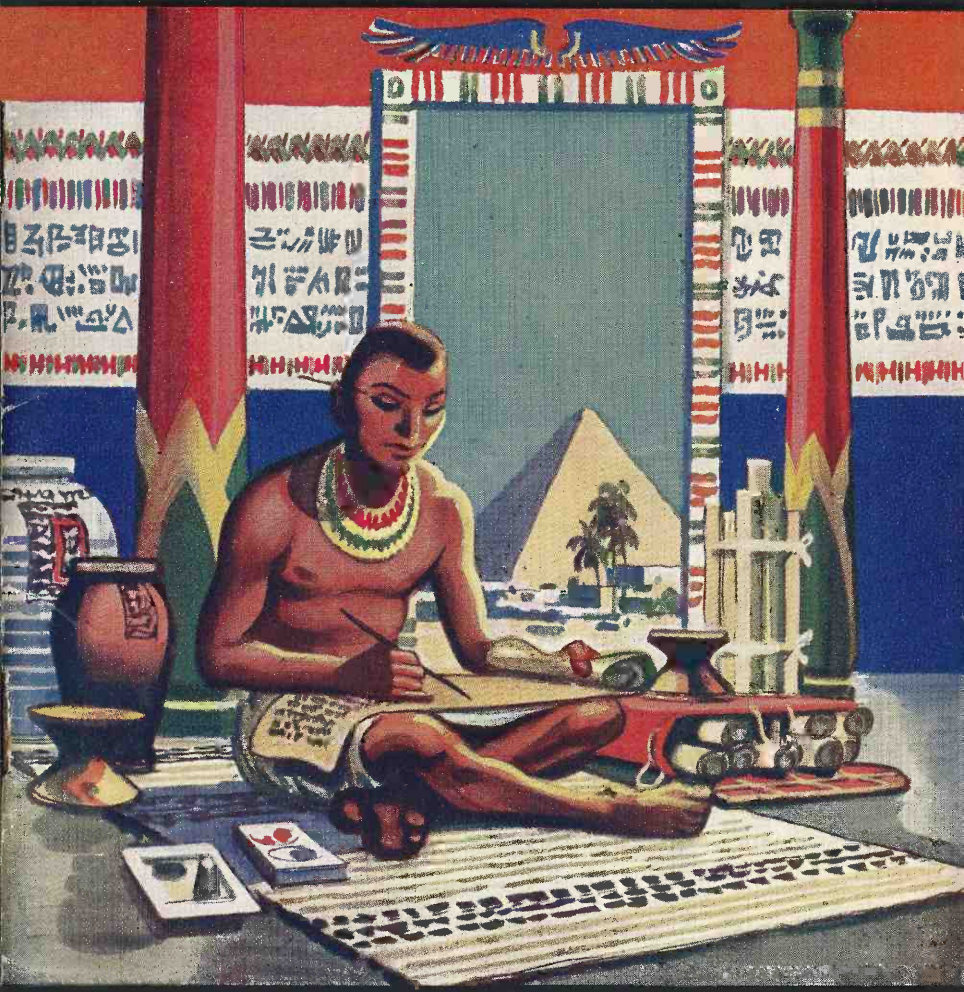
PRINTCRAFT

NUMBER TWO



Published by the
ADANA ORGANISATION

PRICE
1/6

ADANA T.P47

This is some sort of apology to you all. We know we have many times mentioned our new 9½ in. x 7 in. treadle or power machine, but few of our friends have seen it. Why? Well, here we have to use that word which has come to be so topically repugnant—"crisis". Yes, it ties up with that.

A year ago, at the British Industries Fair, we showed the first machine. Perhaps we were rash, for it resulted in a tidal wave of enthusiastic enquiries and orders from foreign buyers, all with the italicised query "*What delivery can you offer?*"

A reasonable date was emphatically demanded, and this meant that practically our whole output was booked ahead for many months, leaving a meagre trickle for the old country. So if you are in the queue for a nine months' wait, please accept our regrets. We are certain, however, that when your Adana T.P47 eventually arrives you will vote that it has been well

WORTH WAITING FOR

Number Two

PRINTCRAFT

May 1948

Published by the
ADANA ORGANISATION

Editor - - JOHN W. WHEWAY
Editorial Director - A. HOLMES
Governing Director - F. P. AYERS

HERE TO STAY

By THE EDITOR

THANK YOU !

I write these two words with deep and sincere feeling. I write them in response to your congratulations, your suggestions and your promises of support. I said in my last Editorial that I was proud and pleased to be " Printcraft's " editor. How enormously increased that pride and pleasure is at this moment ; with what hope and optimism I look forward to the future of our magazine, knowing that I am backed up by such an enthusiastic and helpful band of readers.

" Printcraft " No. 1 was launched with success. In the words of our artist, ex-R.A.F. Thomas Laidler, it hit the target " bang-on."

In No. 1 I asked for criticism and for comments. I have certainly had them. They have been kind comments and enthusiastic criticisms and nearly all of them helpful. Among them was one which I regard more as a compliment than a criticism—our tone was too " friendly." So be it. A friendly note was what we aimed at in launching the paper and as long as " Printcraft " exists so will that friendly note continue to be emphasised.

LAUNCHED !

Another criticism, not expressed with any degree of conviction, was that " Printcraft " was " too light " in its make up. Is it ? I'd like to receive more opinions on this point. Admitted that you do not find features like " The Galley Slaves " and a cartoon and a complete story in an out-and-out technical magazine, but does the small printer want an out-and-out technical magazine ?

There are several in existence, you know, but I am not aware that they interest the wide class of reader to which " Printcraft " makes it appeal. Our aim is to help up-and-coming printers who not only want to know the inside-out of their job, but are also out to interest others who have not as yet been caught by the fascination of print. A too-technical magazine can be very boring to a man who is not steeped ears-deep in his trade, and, perhaps, is always in danger of going above the heads of its readers. That, definitely, is what we are trying to avoid in " Printcraft "—and shall continue to avoid. At the same time we are going to do our

best to keep you slap bang up-to-date. We want you to know everything about print from its elementary stages to its most modern and scientific developments. In endeavouring to impart that knowledge we shall use only language which the small printer understands.

Outside the circle of "Printcraft" readership I found our magazine accepted with great approval. I refer now to my professional friends who hold important executive positions in the printing world. One and all, regarding the magazine from the viewpoint of the small printer, said, in varying words, that they considered it just the sort of publication that was needed, that they thought it would do more to help the small printer than anything they had seen before.

I thank them. Now I would like especially to thank the readers who have made suggestions. I admit that the idea of "Printcraft" Clubs had never occurred to me until my correspondence began to pour in. I have been pleasantly surprised to discover that more than a few of you are anxious to form these clubs in order that you can get together, discuss problems, help each other, and, perhaps, combine to borrow and exchange the supplies you badly need. But of this—more anon.

And so we are launched. Here, with No. 2, the good ship "Printcraft" has reached its second port of call. It has, I am convinced, a future as wide as the oceans on which it sails. When paper becomes more abundant its ports of call will become more frequent, its circulation larger. We cannot, as some readers implore, guarantee to turn it into a weekly, but I am certainly looking to the time when we shall be able to publish every two months.

PRINTING ON WOOD AND CARD PLANT LABELS

MARKET gardeners and nurserymen use a variety of name labels, some of which they require printed on wooden strips so that these can be pegged into the ground for plant identification after planting.

As these strips vary in thickness from 1/16 of an inch to 3/16 inches approximately, the usual make-ready is unsuitable; furthermore, unless special precaution is taken the platen links are liable to be strained.

If the following procedure is adopted excellent results and a perfect lay will be attained.

Make ready your chase in such a way that quick interchangeability of type is possible, and set your matter about two-thirds of the way up the forme. A thing to note is that wooden labels are invariably pointed at one end and the type should be set so that the beginning of the name starts at the square end of the label. After this take a print with light make-ready, following on with a print direct on to the padding card.

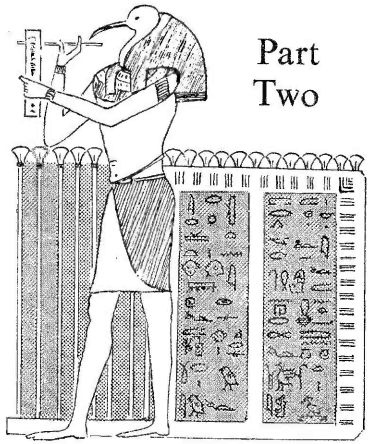
Then remove the padding card from the platen and lay the wooden label to be printed on the card, with its pointed end to the right, and run a pencil round the edge so that the shape of the label is drawn in the correct position on the padding card.

With a sharp knife cut through the padding card closely round the shape marked on the card. This will slot the card to the size of the label. It is advisable then to make this slot a little longer (but not wider) than the actual stock to be printed so that it is easy to register for different length names, and also to facilitate feeding.

The padding card is replaced on the machine with a couple of sheets of paper beneath and the labels fed into the slot. Pieces of thin card or paper can be underlaid in the slot if necessary to obtain a perfect print.

In preparing the machine it is advisable to loosen both the bed adjusting and fixing screws, and push the handle down to the stop, thereby bringing the platen up hard to the type face, then re-set the adjusting and bed fixing screws.

As regards ink: ordinary ADANA No. 1 black is suitable.



Part Two

THE EVOLUTION OF TYPOGRAPHY

The Beginnings of the Art in Ancient Egypt

By VIN ARMITAGE

BETWEEN the Azilian Pebbles (which we discussed at some length in our first article) and the dawn of civilisation there is a gap of thousands of years. The pebbles, as we know, were inscribed in the Stone Age. Our next

THE SCRIBE

evolutionary step takes us into that dim and distant past when ancient Egypt saw the settling down of Stone Age man along the banks of its historic Nile.

From the time of his emergence from the caves our prehistoric ancestor had not conspicuously changed ; his intellectual accomplishments he had added to but little. His quest, as always, was for food. This quest constantly urged him on, making of him a restless nomad who knew no law save the law of possession, whose wanderings covered the whole earth.

Wherever food was to be had there wandered Stone Age man. He took with him his family and the few weapons and tools of stone and bone which hard necessity had taught him to fashion.

His food, as we have seen, was the wild game and fish which he hunted ; the berries and the roots which he gathered ; his home the river banks, the caves and the rock shelters which he habitated only for brief periods ; his clothes (when he wore any at all) the skins of the animals he had slain. His brain was of a quality which you or I possess to-day but outside his food-hunting quest, he had not yet learned to use it to the full, for the simple reason that his restless life never allowed him to settle down. His one most terrific accomplishment, forced on him by hungry necessity, was his skill in hunting.

But his hunting taught him things, unsuspected at the time by the hunter himself. It taught him to observe ; to read the signs of nature in cloud and sky as well as on the ground ; to follow the game where he knew it was plentiful. And in following the game he arrived, in due course, in the land we have known for many centuries as Egypt.

Here, indeed, he found a territory flowing with milk and honey. In the great Nile valley with its ideal climate he discovered food in abundance. Fish was plentiful in the river, the Nile's fertile banks swarmed with " kills " of all descriptions. For the first time his long nomadic quest was halted. He settled—probably with no idea of taking root at first. Then he found grain—the wild Egyptian barley—discovered that he could thresh it and store it and so guard against that hungry future which had been the nightmare of all his evolutionary days.

From that moment cave-man days were over. Civilisation began. Man now had the time and the leisure to divert his thoughts and energy into other channels, and instincts, as yet

unfelt, sprang vividly into life. Organisation followed as a matter of course and, with the friendly Nile as a communicating link between tribe and tribe, a settled communal life was established.

Since communal life has to have its head, the first king came into being. Religious ideas, which had had their genesis in the damp haunts of the darkened cave, took on a new, fuller and more imaginative significance; they became an ordered cult. With the establishment of the first king came the hierarchy, or the priesthood, and with the hierarchy there sprang into being the original ancestor of typography and all its relatives—the inventor of writing —the scribe !

This is a fascinating phase of human history—a phase of breathless development, of rapid expansion, of clever experiment, invention and discovery in which the human mind must have been continually astonishing itself by the limitlessness of its scope. In it the scribe, who was the journalist, the author, the artist, the engraver and even the mason of the day, played a terrific part.

As the priesthood was by far the most powerful sect in the land, the scribe, of a necessity, had to belong to this order. From his earliest days he was tenderly nurtured and instructed by the priests and when his "apprenticeship" was over and he was established in temple or court he was promoted to a high rank and endowed with all sorts of privileges and favours, even to exemption from taxation; even to the giving of his own powerful god—Tehuti, or Thoth, the God of Writing and Wisdom. The drawing at the head of this article was the ancient Eyptians' idea of him.

The earliest Egyptian writing we know is found inscribed upon the pottery of the time and is something like seven thousand years old. It consisted of crude pictographs among which, significantly enough, were conventionalised picture-signs which are unmistakable descendants of the Spanish cave signs and the Azilian pebble signs. Very rapidly these developed into an alphabet of hieroglyphics or sacred writing, each sign expressing an idea or a sound.

The word "Printcraft" rendered in these signs and spelt in our British way would look something like this:

Paper, like printing, had yet to be invented, but the ancient scribe was never at a loss for material upon which to write. When it was not wood or linen or hide it was papyrus. Papyrus, the first "paper," was by far the most commonly used material of the time.

The papyrus is a rush-like plant, growing in the marshy places of Egypt, and is still abundant to-day. To turn it into "paper" the pith was removed from the stalk and cut into strips of uniform length which were laid side by side and close together on a flat board. To this was then applied a coating of gum, after which a second layer of papyrus pith was laid upon the first at right angles. This, of course, joined the two surfaces, forming a stiffish substance which, when pressed and dried, made an excellent writing material.

On this papyrus the scribe wrote his hieroglyphics with a reed pen. In a decorated palette of wood, ivory or stone he carried several of these pens, together with small quantities of ink—mainly red and black—made, usually, from vegetable juices, but occasionally from mineral substances like malachite and haematite.

His job—and what a colossal one it must have been !—was to make copies of the various sacred documents of his day—works like the immense "Book of the Dead," "The Book of Opening the Mouth," etc. He also wrote and made copies of the Orders and Decrees given to him by priests and kings, the Calendar (which the Egyptians also invented), the stories of his day, lists of property and goods—everything in fact which we associate with the literature of a progressive civilisation. Not until, as far as we know, the Sumerians invented the art of cuneiform writing some centuries later, was there a means of easy duplication. Each copy, therefore, had to be done carefully and painstakingly by hand.

AN EARLY REMINDER

Forewarned is forearmed. The sooner one is forewarned the better is he equipped to defeat disappointment. This is our reason for urging you to order No. 3 of "Printcraft" NOW. We confidently forecast that its appearance in August will be greeted with a bigger-than-ever demand. Why? Turn to page 36.

And as civilisation grew so grew the work of the scribe.

It became necessary eventually to adopt a much speedier and more simple form of writing than the hieroglyphic. This was known as Hieratic.

But even Hieratic, as the pace of life became faster, as progress increasingly developed and wider and wider became the demands made upon the scribe, also had to undergo a modification, which brought into being a still more easily understood form of writing known as Demotic.

Thus we liken our early Egyptian scribe to the printer of to-day—as indeed he was the printer of his own day. I have also mentioned that he was an engraver. This would put him on the line with our etcher of to-day.

He was; and an excellent engraver at that. In stone printing has its foundations and it was principally upon stone that our ancient Egyptian executed his engravings.

Exquisite stuff it is, too, as you will agree if you care to visit the British Museum and take a look at some of the excellently inscribed tablets and sarcophagi on view there. Some inked impressions I have seen, taken direct from these ancient stones, can rank favourably with the best lithographs of to-day.

The most famous of these stones is that historic slab of basat known as the Rosetta Stone. It was found near the town of that name in 1799 and when it was discovered that it possessed the key to the hitherto indecipherable writings of the Egyptian ancients it became the sensation of the archeological world. The Emperor Napoleon was so interested in the Rosetta Stone that he ordered two of France's most expert lithographers to make copies of it and this they did in precisely the same way as you or I might have executed the order—by first inking up the stone and then taking proofs with the aid of rubber rollers.

There was, I believe, a score or so of these impressions taken and sent to scientists and archeologists and teachers all over Europe. This Rosetta Stone, by the way, is also in the British Museum.

The scribe also engraved on metal—gold and silver, but principally copper. The thinner, flat specimens are so startlingly reminiscent of modern copperplates that they might in fact have been prepared in an up-to-date process department. They were not, of course, intended for impressing—most of them are in the form of amulets or ornaments designed for personal use or for the adornment of mummies. Inscribing the coffin cases of mummies was, incidentally, another job which fell to the lot of the scribe.

Which all goes to show that it was the ancient Egyptian who dug the foundations of typographical art. And in fact, the ancient Egyptian DID print—not on paper—no; but on linen. How and when he did it we have no further space to discuss here. We will examine it in our next article when I also hope to tell you about other early methods of duplication which foreshadowed the typography we know to-day.

ADVERTISING for

Every Craftsman's Guide to Practical Publicity

By CHARLES HERBERT

IT is no good equipping yourself with a small printing plant and then sitting down to wait for the customers to roll up. They won't! We've all heard that one about "If a man makes a better mousetrap than his neighbour . . . the world will make a beaten path to his door." But it just doesn't happen that way. Not these days. You have to let the world know you are there!

If you want to build up your business you have not only to produce good work but you must let people know how good you are. You have, as it were, not only to make a "better mousetrap" but you must *bait* your trap in order to attract the customers.

There's no need for me to tell you that the first and most important thing is to be well informed about typography. You must know all you can about printing and be prepared to advise your customers when they need advice—and they invariably do. You must help them (to your own advantage) to make up their minds. The work you turn out must be of a high standard—both as to quality of printing and presentation of design.

This is your solid foundation. Now to build.

YOU NEED A NAME

Firstly you must provide yourself with a name. Not necessarily your own name, nor just any old name, but a *good sounding* name. For instance, "THE SEA-GULL PRESS" is much better than "SMITH'S PRINTING WORKS" and "THE LILLIPUT PRINTING CO" is infinitely superior to "J. JONES—Printing Done Here." On the other hand, "J. HENRY JONES—PRINTER" is streets ahead of a fanciful concoction such as "THE GOODWORK CO." or "THE CHEEP PRINTING CO."

If you possess an important-sounding name, by all means use it; but if not, then try to find one that is dignified and well sounding. If you can't think of something in the "Sea-Gull" category base your name on some important local feature which will make people think of you every time they see the name. The "Old Oak Tree," "The Thatched Cottage," the "Square Tower"—you must have places like this in your vicinity. Just look around and set your wits to work.

YOUR IMPRINT.

Having decided on your name, the second item in your publicity campaign is your "imprint," the mark you put on all your printing. Now most small printers just have a reference such as, "Printed by John Jones Co., 6, East St., Printown," or something like that. It is not enough. You need something distinctive, a little design or a shape incorporating your name so that it will be recognised as yours at first sight.

If you have chosen yourself a good name you will not find this question of a mark very difficult to decide. If, for instance, you have called yourself "The Sea-Gull Press," you can use a tiny impression of a flying gull with your name underneath. It will not have to be very big because the customers won't like you taking up too much of their space.

the SMALL PRINTER

Your next step is to get yourself well known in the neighbourhood. Identify yourself with as many aspects of local business and social life as you can.

IDEAS

Don't despise the Dance Tickets, Church and Club Notices, Whist Drive Cards and so on. Do them at a special rate if you like, but on each one be sure you get your imprint.

Here you see the importance of the design you have chosen. If you are playing your cards correctly, folk in the neighbourhood will soon be saying, "The Sea-Gull Press seems to be printing everything around here!" You must make them see your flying gull so often that they will think you are the only printer for miles around!

GETTING DOWN TO ADVERTISING

Now let us get down to advertising in the Press. Where should you advertise? What form should your announcements take? Obviously the local papers are the first fields to exploit. If you can get your advertisements in a special position amongst the announcements of the local tradesmen, that is a good spot. Your local tradesmen should be your best customers and it is wise to go "all out" for them. Their ads. appear, or should do, in the columns of the local Press. You can bet your life that the first thing they do when they get their copy of the paper is to turn to *their* ad. If yours is near it commands their instant attention.

Now what are you going to say in your advert.—how are you going to display it? It must be something to catch the eye—something to draw the attention of the tradesman from his own announcement to yours.

What do you want to say? Naturally you want to point out to the tradesmen that they should give you their business, that you are a good printer, with ideas, reasonable rates and speedy delivery. But it is not sufficient to say only that—you have to say it in an interesting and attractive way—if possible make it topical. Topicality is the secret of good advertising. This will not only attract potential customers but also carry with it the implication that you are an up-to-date student of events.

You want them to give you their print orders instead of sending them out of the district. It will suit their convenience, apart from supporting a fellow local tradesman. Right! Now what are the chief topics to-day? There are two. Export and Import, and the Crisis. Let's take the first. An idea is already waiting for us :—

WHY "IMPORT" YOUR PRINTING?

Your wording, or "copy" would go something like this :

"*Why import your printing from another district when there is a printer on the spot who will not only give you GOOD Printing, EXCELLENT Service but BRAND NEW IDEAS too . . .* "

Now let us take the other line :—

THERE'S A CRISIS IN YOUR BUSINESS !

This is your argument :

" *Every time you issue a printing order, whether just for a billhead or a sales-creating leaflet, there's a crisis in your business. The work you get may make or mar your prospects for some time to come. So be sure you get the best printing—something that will have the effect of IMPROVING your business, increasing your prospects . . .* "

There are ideas everywhere if you know how to look for them. You can be topical about local events. Supposing you have had a local whist drive which was won by Mrs. Smith for the ladies and Mr. Brown for the men. In that case you could produce something like this :

CONGRATULATIONS TO MRS. IVY SMITH AND MR. REG. BROWN

Congratulations to the winners of the Whist Drive held at the Carnegie Hall last Friday. The bright little scoring cards which everybody admired were printed by us—a fact which should convince all local business men that

THE SEA-GULL PRESS
TAKES THE PRIZE FOR PRINTING !

SPACE AND FREQUENCY OF INSERTION

What size should your advertisement be ? How often should you advertise ?

For a start—unless you have lots of money and are prepared to spend it so —I suggest 2-inch single column insertions. As to frequency—as often as you can. Keep banging away at it ; keep it topical, have a fresh idea every time your ad. appears.

And here's a final word of advice. When you are approached by a client who wants you to produce some sales-material, have half-an-hour's general chat with him. Get him to tell you about his business, how it is going, what he does and how he does it. Listen to him carefully and make some mental notes. Only in one case in a hundred will he fail to say something that will provide you with an idea, and apart from this *your* interest in *his* interest is bound to make him warm towards you.

" PRINTCRAFT'S " POSTBAG

News and Views from " Printcraft " Readers

MANY thanks to the hundred or so readers who wrote to congratulate us on our first issue of " Printcraft." Comments and suggestions of interest to other readers were :

From J. Horrocks (Bolton). " *Why not go a step farther now by forming a Small Printers' Association ?* "

Reply : While thanking you for this suggestion I am afraid we can do nothing about it at the moment. The work entailed would be really too terrific for our already overburdened staff. We will return to the subject at some future date.

To H. R. Malby (Essex), G. S. J. Hale (Luton), B. R. Jarman (Streatham). Your suggestions are very good and I thank you for them. But for the same reasons given to our friend Mr. Horrocks above I regret nothing can be done about them at the present time.

From R. Taylor (York). " *I suggest that the feature, 'The Law and the Printer' be continued.*"

Reply : It will—but only as occasion requires. Another article on the same subject by the same author appears in our next issue.

From George Maxwell (Wishaw). " *I enclose diagram and details of a home-made cutter of glass and wood which I use for cutting tickets.*

Reply : Very interesting, George ! Thank you. As I am sure other readers will be interested in your " gadget " I am having it prepared for publication in " Printcraft " No. 3.

From F. Templeton (Exeter). " *Will you please tell your readers that spaces are not supplied with founts of type ?* "

They are told herewith, thoughtful reader. It is the usual founder's practise to supply type only and not spacing material on orders—this being only fair to purchasers, seeing that spacing material is cheaper than type.

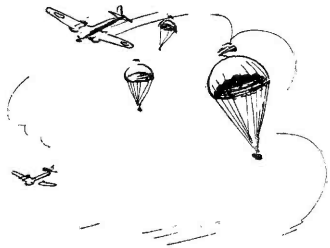
CAN you imagine picking up your daily paper—to find all its news "Passed by the German Government Press Censorship"? Or opening your usual magazine to learn that every line in it has been approved by the uniformed hirelings of a foreign power?

HISTORY

You laugh? But it might have happened—yes, here in Britain. For four or five years it actually did happen in France, Belgium, Holland, Norway and the other Nazi-occupied countries of Europe. During those black years, freedom and happiness dwindled to little more than a dream. In their place appeared the hideous reality of the concentration camp, the murder squad, the blackjack and the torture-chamber!

When the steel grip of Nazidom clamped down upon the Continent, Hitler's hordes grabbed control of the Press, the radio, the films—and everything else. Existence changed drastically for the defeated nations. Old orders vanished overnight. New governments arose and took the public by the throats. New bodies appeared—to plunder and bully and browbeat. New police forces came into being—to rob, to spy, to punish and kill.

During those nightmare years, no man was safe from the black-uniformed terror that came by night. None knew

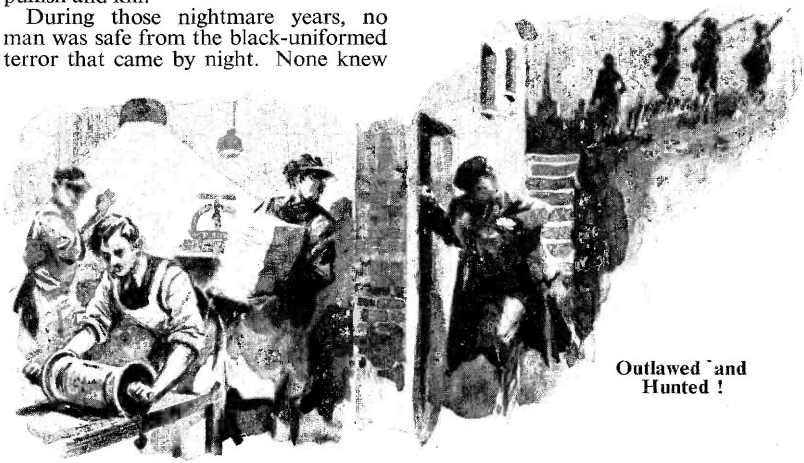


TO PRINT MEANT DEATH!

The Story of the European Underground Press

By LEONARD DRURY

from day to day what his fate might be. And with the open terrors of the occupation, there came, too, dangers of a more secret insidious kind. One's own neighbour or workmate might be an informer—one's own relatives, even, spies of the dreaded Gestapo police! At any moment men and women could be seized and hustled away, never to be seen again. And what happened to them no one knew.



Outlawed and Hunted!

But what about the printers of Europe? They, like everyone else, were swept up in the Nazi holocaust. They, too, found themselves toiling for German masters. If they refused, prison or death was their portion. The newspapers, the books and the periodicals they were accustomed to print vanished one by one. In their place they found themselves setting up Nazi orders and proclamations, threats and cajolements, doctored news bulletins, lying pamphlets.

But printers, like their journalistic brethren, have long had a reputation for stubbornness, as more than one tyrant in Europe's history has had good cause to know. These printers and journalists of Hitler's unwilling new empire quickly showed that they were made of the same stern stuff as their forefathers. From the first they took for their motto "Nil Desperandum," and how marvellously they lived up to it! What a magnificent contribution to final victory was theirs!

In these articles we are going to tell you how they defeated the enemy; how they risked their lives to print the ugly truth about Nazism. How they met behind locked doors to turn out the illegal newspapers and magazines that ridiculed and tormented the Germans, and how they roused their fellow countrymen to heroic resistance. They pitted their pens and printer's ink against machine-guns and bayonets and—they won!

It is a thrilling story, this tale of Europe's Underground printers. Much of it will never now be told, for so many of the gallant men and women who served lie in the graves of the persecuted. But from those who survived, who walked out alive from the hell that was Hitler's Europe, we can pick up the main threads of the story.

We start with Belgium—and for a special reason. Belgium, the "gallant little Belgium" of 1914-18 and the land of blood, suffering and heroism during the last cataclysm, has twice known the horrors of enemy occupation. Twice in a lifetime have German armies smashed at her towns and reduced her rich, lush fields to a shambles. Twice have the Belgian people fought back, desperately, fanatically, until freedom was won again. And twice has a Belgian "Underground" press appeared, to render service in the fight for freedom.

In 1914, the German overlords entered Brussels, set up a puppet government, and proceeded to rule the country as a vassal state. But while the Allies halted the grey tide on the Western Front, and slugged it out toe to toe, the citizens of Brussels, cut off from friends and allies, fought their own battle for freedom.

Not least among their weapons was the Underground press—"La Presse Clandestine," as they called it. It was born out of the tempers of men who refused to be slaves, and it gave tremendous impetus to the struggle. In suppressing the press the Germans imagined they had stilled the voice of Belgium—but they had not reckoned with the fighting spirit of Belgium's pressmen and printers.

One after another illegal newspapers sprang up to give the lie to the "official" news the enemy published; to let their compatriots know that the voice of truth could still prevail.

Among these illegal Belgian papers of thirty years ago was the celebrated *La Libre Belgique*. Published in Brussels, under the very noses of the invaders, its fame spread far beyond the capital, even beyond Belgium itself. To the people of that stricken country it brought new hope and inspiration; to the fighting nations on the Western Front, a signal that Belgium had never hauled down her flag.

In 1939, the German war machine, re-created by Führer Hitler, clanked into action once again. The Germans had not yet learned that crime doesn't pay! The blitzkrieg was on. By June, 1940, the conquest of Belgium by its overpowering neighbour had been accomplished again.

The swastika floated menacingly over Brussels, and Belgium, for the second time in a century, knew the power of a ruthless censorship which swallowed up its newspapers. News, like freedom, appeared to be dead until, on August 15th, 1940, a new newspaper bearing a familiar title startlingly appeared in the streets of the capital. *La Libre Belgique* had been born again!

By courtesy of the Belgian Ministry of Information

Just a few of the Underground publications circulated in Belgium during the war.

Its fame spread like fire through the grey streets and boulevards. Before long, 40,000 copies of each edition were being secretly printed and passed, surreptitiously, from hand to hand.

Think what that meant ! 40,000 copies to be printed and distributed by a hunted, outlawed organisation that went in hourly peril of being exposed and smashed up. Every scrap of paper had to be acquired illegally ; every drop of printing ink was officially forbidden. The Belgian public was delighted ; the Germans furious. Intensely the secret police probed, marched and

(*Continued on page* 15)

PRINTER'S INKS

Extracts from Lectures Given

By H. D. KEATS*

THE title of this article is short, yet the subject is vast—far too vast to be covered in one article, for ink is one of the principal ingredients of our complex trade, and one which often causes a great deal of anxiety. Ink difficulties have brought many a grey hair to a printer's head, and these notes, although perhaps common knowledge to many, may help some in solving their ink problems.

Good and sufficient inking is a prime factor to the production of satisfactory print—and by that is not meant overloading your type with ink. Rollers are therefore carefully adjusted so that they roll the forme lightly yet firmly, and with no undue pressure liable to result in distortion.

A roller that is heavily set loses its cylindrical form and will touch the edges of the gutters lying parallel to it. Too much pressure also would have a tendency to wipe the ink off the face, resulting in a grey printing and a rapid filling-up of letters. Rule and border formes always present difficulties in obtaining evenness of colour. Ample distribution and rolling power is, however, the best safeguard against the majority of rolling difficulties.

Now, about inks themselves. Many of the difficulties that arise when a forme is on the machine are due to ink,

INFORMATION

and a few hints and wrinkles on this subject will prove useful.

When dealing with copying ink the work has often a tendency to set off. This may quickly be overcome by adding a little oxgall to the ink, which will make the print set quickly. If the ink is too thin, a little powdered gum arabic will prove to be a very effective remedy. If, on the other hand, the ink is too thick, add a little glycerine to the plate with the tip of the finger. It will work like a charm. There is also a preparation already made up called "Adinol." This is in paste form and acts both as a thinner and drier. The uninitiated perhaps might prefer this.

Coated paper often causes trouble in machining. "Picking" may often be overcome by using spirits of turpentine in place of ordinary strong driers. It must, however, be borne in mind that picking is not always due to the ink; it is sometimes the fault of the paper not being fully matured.

Stiff inks can always be made workable by adding a piece of vaseline the size of a pea to each knife-full of ink. If the stock is hard-sized, however, this must be done with great care, as grease naturally affects the drying.

It is always advisable to use nickel-faced stereos when working a red ink job. The constituents of red ink have a chemical action on the copper shells of ordinary electros, causing them to corrode. There is, so far as I know, no remedy.

Castile soap powder, if obtainable, acts well as a reducer. Always remember the old rule: "Stiff ink and hard rollers—soft ink and soft rollers."

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Stiff ink used in conjunction with soft rollers may pull the composition from the roller stock.

In this connection it is well to know that vaseline applied at the ends of the rollers will prevent them from tearing. Care must be taken, however, not to get the vaseline on the roller surfaces.

It is often overlooked that dust is continually falling, and dust has ruined many a good job. It clogs up the screen of half-tones and ruins delicate colours. It is always advisable to wash up at least once a day, but if working bright lakes or delicate blues, wash up twice if the purity of colour is to be retained.

On common papers, containing chemical or mechanical wood pulp, keep to blacks and bronze blues. Common stock spoils good colours, and delicate tints never look well. The suitability of ink to stock is often given scant consideration, but a little care in this direction will amply repay the printer.

A high-class job cannot be satisfactorily produced with a low-grade ink, and *vice versa*; thus Adana No. 1 black for ordinary jobbing and No. 2 for superior work.

In selecting a black ink for use on a coloured paper it is sometimes found that the ink will not retain its density. Printed on a yellow ground it will appear violet; on red, green; on green, a dirty red; and so on. Do not blame the ink-maker; a little modification of ink is all that is necessary. It is advisable to keep by you for reference notes of the various effects and their antidotes. These will be dealt with later.

When choosing the colour of ink to be used for a job, the following hints may be useful; cold greens contrast with crimson, pink, orange, and purple, and harmonise with blue, brown or grey; warm greens contrast with crimson, purple, maroon, red and pink, and harmonise with yellow, orange, light blue, brown, or buff and grey; orange contrasts with purple, crimson and grey, and harmonises with yellow, some shades of green, buff and warm colours generally. On white, almost any colour looks right.

Never choose a deep colour for tints over which there is a second printing. Even if the overprinting is to be in bold, heavy type, there is a grave danger that it will come out unsatisfactorily. The mass of heavy colour will disturb the eye, and the effect will be lost.

TO PRINT MEANT DEATH

(*Continued from page* 13)

investigated, promising death or imprisonment to the breakers of their laws. But still *La Libre* continued to appear.

Fired by its example other pressmen took up the call. Underground enterprise became rife.

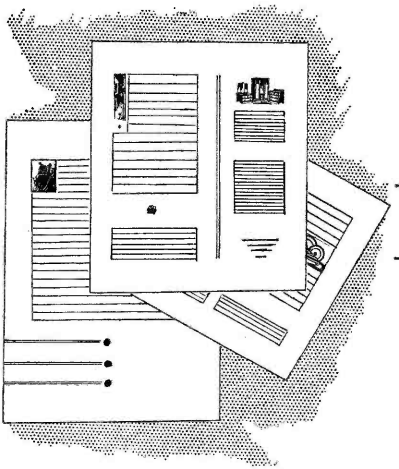
In a very short time there was a whole group of them. They told their news in the face of the threat of death; they aired their views in spite of all the desperate risks they were obliged to take.

Wherever these papers appeared, there the torch of liberty burned brightly and steadily, unquenchable even in the darkest days of the struggle.

The Underground papers and the fighting forces of the Resistance went hand in hand together. Indeed, each could hardly have survived without the other. To camouflaged, makeshift editorial offices in private houses, cellars, sheds, barns, attics and even caves, there came toughened undercover fighters, bearing news of the war, instructions from resistance leaders, proclamations from Belgium's exiled government, biting cartoons and searing articles which kept the enemy's fury aflame and daily preserved the hope in the hearts of their stricken countrymen.

It is a great and heroic tale. Would that I had the space to do it the full justice it deserves. It is a tale of a desperate printing war, of unbelievable hardships and peril courted for the sake of the printed word. But it also had its lighter chapters.

In the next issue of "Printcraft" we shall tell how the Germans tried to smash the Underground press of Belgium by terror—and how the daring pressmen pulled off a coup against the Nazis that set the whole country laughing.



LAY-OUT AND DESIGN (2)

The Print-Planner's Guide

By JOHN WHEWAY

UNDOUBTEDLY a good sense of typographical lay-out and design puts the small printer streets ahead of his less-knowledgeable competitors. As I said in our last issue ninety per cent. of your customers come to you without the faintest idea of how they would like their copy set up. They imagine, rightly, that it is the printer's job. A good many of them, quite reasonably, want to know what the job will look like when in print.

This is where the man with no, or a very poor, knowledge of lay-out finds himself up against it. He may be an excellent typesetter ; he may even be able to visualise the printed job in his mind's eye. But how is he to convey that to a print-ignorant customer ?

How fortunately different is the lot of the lay-out printer. Having trained himself in the art of typographical design he can see at a glance what is wanted ; in a very short time can rough out three or four schemes from which the customer can make a choice. Result ; customer goes off with a comfortable feeling that he has given his order into the right hands ; the

FOUNDATION

printer is happy in the knowledge that his customer is half-satisfied before the job is begun.

And look at the saving of time and money ! In actual setting the lay-out printer has only to follow the plan he has already worked out and since he will have taken into consideration everything that matters—such as sizes of type, position of blocks, borders, initials, etc.—few difficulties are likely to crop up. His rival, on the other hand, finds himself forced to experiment, to reset, to re-arrange and revise—all in the type itself.

There is a third great advantage—neither commercial nor economic. This is the intense satisfaction the craftsman experiences at having created a work of typographical art—and that, perhaps, is the greatest reward of all.

If, so far, you haven't thought over these points, ponder them well now and if you aren't a lay-out man resolve to become one at once. There is nothing really difficult about it if you are determined to learn your lessons thoroughly.

APPRECIATION AND APPLICATION

There are certain attributes the typographer must acquire. Since he has made it his duty to study good print whenever he sees it, he has probably gone a long way to developing these already. We may divide them into two classes—Appreciation and Application. Under Appreciation we may list :—

1. Recognition of type faces at sight.
2. Assessment of type sizes at a glance.
3. Appreciation of contrast.
4. A love of balance and dignity.

JOHN SMITH & SON

are pleased to announce that on June 1st they will open new premises at 10, High Street, and to mark the occasion will give away 12 bonus coupons to the first 100 customers presenting this leaflet. These coupons, each value 1/-, may be exchanged for goods in the shop.

COME EARLY, CUSTOMERS !

10, HIGH ST., NOTOWN

Fig. 1

JOHN SMITH & SON

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COME EARLY, CUSTOMERS!

Fig. 2

The above, definitely, go hand in hand with the virtues of Application which are required when we actually get down to work on the lay-out pad. Under this head of Application we may tabulate :—

1. Ability to interpret in type the message the copy is intended to convey.
2. Ability to imitate reasonably the type-face intended for use in design.
3. Meticulous care in sizing up, sketching out and justification.
4. Devotion to detail.
5. Neatness and cleanliness in building up design.

I will not expand on these points here. Their importance will become obvious as we progress.

THE MESSAGE

Practically every job which comes into your printshop—be it large or small—should be planned on the pad before being carried out on the frame. But first study your copy. It has been written with a definite purpose, you know, and it is your duty to proclaim that purpose in type. It is not sufficient to turn out a piece of work which, from a purely typographical point of view, may be a real eye-charmer. If it fails to bring out prominently the message in the copy-writer's mind it is a failure. The example given, an octavo handbill which may come your way tomorrow, illustrates the point, I think.

Figure 1 is a pleasing piece of typography but at a glance it tells you nothing except that John Smith has new business premises at 10, High Street. Now John Smith wrote his copy with the purpose of attracting customers to his new premises and to further that purpose dangled the bait of a free gift. The free gift is the sensation of his announcement. It is John Smith's way of saying " Come to my shop and I will give you so and so." He knows the average man in the street won't care a hoot about John Smith's new premises, but that he will certainly be intrigued at the prospect of getting something for nothing.

Now you see how the printer has interpreted John Smith's message. The fact that John Smith is giving away

(*Continued on page* 30)

The aim of "Printcraft," as you know, is to help the small printer in a practical way. We want your printing to be as trouble-free as possible; hence the introduction of this new feature, written by an author who, catering for small printers for the last twenty years or more, has an unrivalled knowledge of their problems, their mistakes and their difficulties.

We hope you will take every advantage of the Service, however small or large your "plant" may be, or whatever type of machine or equipment you use. It is free and open to every reader of this magazine. Replies will be given by post as well as in the pages of "Printcraft". If you desire a reply by post, however, we ask you to enclose a stamped and addressed envelope when you write. —The Editor.

"PRINTCRAFT'S"

The Small Prin
Asked and

Conducted by

FIRST let me answer a few of the questions which have been asked me a score of times during the last few years. They are common problems which are constantly returning.

1.—My machine has a paper gripper that does not reach across the entire length of the platen. Is this correct?

Yes. So long as the blade grips a fair part of the paper that is sufficient. The shortest adjustment is the best, as the grip is more firm and there is less danger of fouling the type.

2.—On my machine the rollers have a tendency occasionally to jump off when they leave the type bed.

See that the spindles of the rollers are straight. If they are not, they require attention. If they are, there are two other possible causes. (1) *Type bed set too high. Many try to improve bad composition by bringing up the type bed. Your type bed should not be used in this way. Keep it well back and adjust pressure screws correctly.* (2) *A little oil on the roller carriage springs and spindles please. I emphasize—a little.*

3.—When I try to get a good even print I get an imprint through the paper.

Have a look at the pressure adjusting stop-screw on the main body, underneath the handle. It is set too low, maybe. Bring it up to the maximum allowable. The handle should come into contact with this at the time when the type forme reaches the paper with just sufficient allowance to give a firm impression. If set too high you will get no print and will feel a jar on the handle.

4.—The paper I am using has a tendency to cling to the platen which slows up the feeding.

Why not a little french chalk rubbed over the make-ready? You'll find that will do the trick.

5.—I work on the kitchen table—the only place possible as I do not boast a shed or a spare room—and I am not able to fix my machine. This makes it awkward to work.

I know old chap! The kitchen is the wife's domain. Bolt your machine on to a stout board and for goodness sake countersink the bolt heads to prevent marking the table. Now you can clamp the board on to the table with two G. cramps (or clamps) and remove it in a jiffy. Supper's ready!

Now for a few of the more recent queries!

6.—I would like some advice on printing with gold and silver. (J. Harrison, S.W.12.)

You can use prepared Gold and Silver inks in the ordinary way, but I suggest printing with bronzing medium and dust whilst ink is still wet, with Gold or Silver powder. This is applied with a soft pad of cotton-wool and brushed off. Go easy with the powder, however—a little goes a long way.

7.—What is meant by 5 on 6 point? (H.S., Wolverhampton.)

This means a five-point character on a six-point body. The matter will be more fully explained in a forthcoming article.

8.—Can type-high numbering machines be used in hand presses such as Adana? (B. Shelton, Richmond.)

Yes, certainly. They work on the principle of the platen pressure depressing the number which automatically operates a ratchet and thus brings the next number into position. (E. Flint, Liverpool.)

9.—I travel abroad and wish to take my little machine with me. Can I have special rollers fitted for different climates? (T. Smith, Reigate.)

Certainly—in fact this is very advisable. Special composition should be used for some tropical conditions. Where extreme heat, cold or humid conditions exist I prefer rubber rollers. I do not advise rubber rollers where composition ones can be used, however. The compo carries a slightly heavier ink film.

10.—What is the metal used for manufacturing type? (Curious, Dover.)

It is an alloy of tin, antimony and lead.

11.—I find that if I screw my lay gauge down tightly thin sheets are apt to slip through. (O'Flynn, Dublin.)

Bow the ends of the gauge very slightly upwards so that, when resting on the platen, the gauge is high at each end; then screw down sufficiently to bring it parallel along the entire length of the tympan card. Take care though. Don't bend the gauge like a meat hook, please!

12.—Lately I have broken two platen return springs. What is the reason for this? ("Amateur," New Zealand.)

I should say through "slapping" the platen on to the type, or maybe releasing the handle suddenly. It is possible that the pressure control screw is set too low. See answer to 3.

13.—The enclosed is a job I have just done in two colours. I am not satisfied with it but cannot tell why. (M. Terell, Ashton.)

The use of two colours has destroyed the continuity of the subject matter. Reset for one colour; close up somewhat. The job sprawls over the sheet. Emphasis can be achieved by indenting and resetting bolder the part you have printed in red.

14.—I am setting up in business as a small printer but am rather worried about Purchase Tax. How do I go about this? (G. B., Bradford and others.)

Purchase Tax is only payable when your business or businesses associated with it attains a turnover of £500 per year or more. Then you should consult your local Customs and Excise authority.

15.—I am rather puzzled about quotation marks—" and ". The " marks, I know, are apostrophies which are supplied with a fount of type. For some reason, however, the " are not supplied. Why is this?

The " are merely ordinary commas and are set upside down for opening the quotation (this is the correct typesetting practice).

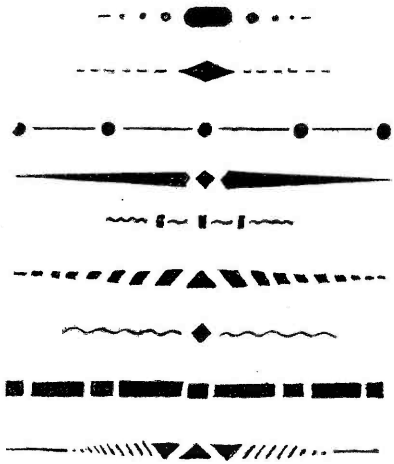
16.—Is it necessary to have separate rollers and inking plates for different colours? I find, except for the repeated use of black, that the cleaning off of one colour does not appear to be sufficient to enable the same rollers and inking plate to be used for another colour immediately.

When changing colour it is sometimes necessary to clean the machine, rollers and type twice in order to remove any residue from the previous colour. This especially applies to such contrasting colours as black and red. It is not normally necessary to keep separate rollers for colour work.

CENTRE SERVICE

ter's Questions Answered

A. HOLMES



PRINTSHOP'S HANDYMAN

Making Your Own Rules, Borders and Ornaments

By WILLIAM HOLT

BRASS or zinc fancy rules or rule blocks are expensive to buy—when you can get them ! Even then there are usually very few designs from which to choose. At the same time fancy rules are a very necessary part of the small printer's composing equipment.

So what does one do ? Why, make your own, of course.

There is a deep and satisfying pleasure in this project. First because you can give your ingenuity full rein in the fashioning of your own patterns ; secondly because you are saving yourself time and money ; thirdly because you can use up odd scraps of old type-high rule for the purpose—even though some of this material be scratched or damaged.

Opposite are a few suggested designs which you may either copy or which you may adapt to suit your own ideas. And here is how you make them.

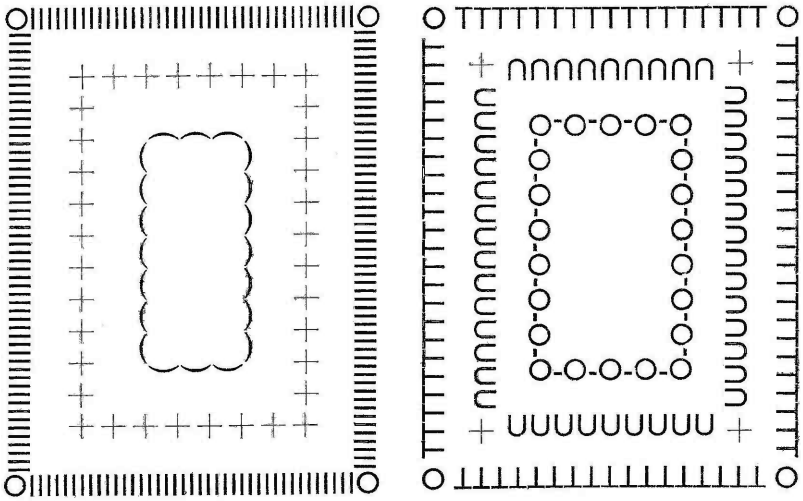
First arm yourself with three fine metal files—a half circular, a flat, and a triangular. Trace out the design you intend to copy on to a piece of stiff paper or thin card, cut this out as a narrow oblong shape and then, placing it across the metal on which you are going to work, carefully mark the divisions dictated by the design. For making curves you will, of course, use your half-round file ; for straight pieces the flat file ; for cutting wedges in the metal so as to form small circles or angles, your triangular file.

Not hard, is it ? All that is required is a bit of artistic inventiveness. And what a proud delight to add a few of your very own specimens to your composing components !

As with fancy rules, so with borders and ornaments—you can't get enough of them these days. Here again Mr. Printer must fall back upon his own resources. If he has a good supply of type—especially the non-serif variety—serviceable borders can be made without undue worry. A few suggestions, with appropriate corner pieces, are given below and some illustrated at the head of the next page. They may be used as you see them there or may be set with fine rules to make a more complete framework.

Try them out in your spare time and see the number of other combinations you will find for yourself. These are the ones I have found most successful.

1. Borders of Grotesque or Square Sans cap " T's " with cap " O's" as corner-pieces.
2. Cap " O's " alternated with hyphens.
3. Cap " U's " inverted, with plus signs as corner pieces.

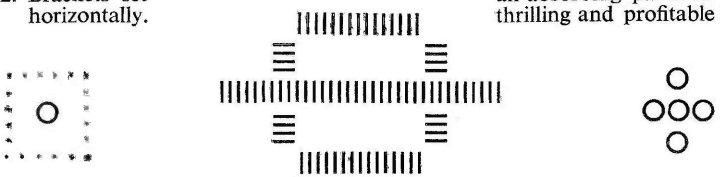


Borders from your typeboxes. How many more can you find there?

4. Cap " V's" inverted, with plus signs as corner pieces.
5. Cap " W's " inverted, with plus signs as corner pieces.
6. Cap " X " with cap " O's " as corner pieces.
7. Figure 8's alternated with hyphens.
8. Cap " I's " with cap " O's " as corner pieces.
9. Plain leaders (for very light work).
10. Mathematical = signs.
11. Mathematical + signs.
12. Brackets set horizontally.

Ornaments, admitted, are trickier. But here again your ordinary typecase will solve the problem. A cap " O," for instance, centred in a square of leaders, makes a dignified and pleasing ornament ; a square of cap " I's " with a centre line of the same letters is also pleasing. Five cap " O's " set as illustration is an attractive ornament or, with the addition of metal rules on either side, will make a satisfactory dividing rule.

With a little imagination it is wonderful what you can do with odd bits of brass rule, asterisks, plus signs, multiplication signs, daggers and even shilling strokes. The suggestions briefly mentioned here are only intended to set your mind working. Once you get going you'll find all sorts of combinations in your type case. It's an absorbing pastime. And thrilling and profitable fun !



Ornaments from your typeboxes. A little experimenting will give you dozens of others.

PRINTER'S QUIZ

Can You Answer Correctly?

1. LET'S have a little spelling-test first, shall we? Here are ten words in frequent usage, but can you tell which are spelt correctly?

Digestible Sacriligious
Irridescent Ignitible Exxagerate
Daguerreotype Rhododendrum
Dexterous Toboggan Centenery

2. In letter-writing do you sometimes find yourself using expressions such as these? They are not strictly correct. Can you spot what is wrong with each?

(*a*) . . . will submit same for your approval.

(*b*) I did not think to write you sooner . . .

(*c*) We find the choice more preferable . . .

(*d*) These items are rather unique . . .

(*e*) We hope to quickly send goods . . .

3. The apostrophe can be irritating at times, especially when denoting possession. Can you insert it correctly in the following sentences?

(*a*) That must be the Robinsons order.

(*b*) Didnt I say it was hers?

TEASERS

(*c*) Here is its other half.

(*d*) Surely this one is Janes?

(*e*) Many happy returns on Toms birthday.

4. It's often very easy to think of a word that is the very opposite to the one we want to use. See if you can jump to the word that contrasts best with each of the following:

Transparent Summit Rough
Attract Belief Supply Exit
Pleasure Wealth Wisdom

5. The plural of most everyday nouns is made simply by adding an S—yes, we know. But how would you pluralise these tricky words?

Court martial Eskimo Innings
Penny Ignoramus Index
Mumps Basis Octopus
Lord Justice

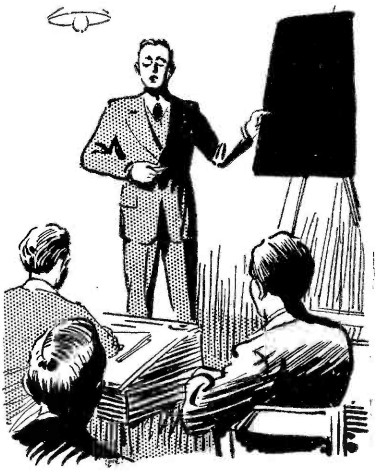
6. We don't have to be Latin scholars to know when to use certain dead language words. But are you sure you know the exact meanings of the following:

(*a*) viz. (*b*) ad lib. (*c*) i.e.
(*d*) ergo (*e*) pro (*f*) con.

7. Abbreviations are always being met with in writing and printing. Are you sure what these mean:

(*a*) E. and O.E. (*b*) Ph.D.
(*c*) F.Z.S. (*d*) C.W.O.
(*e*) M.W.G.M.

Answers to Quiz on page 26.



"PRINTCRAFT'S" SCHOOL FOR BEGINNERS

Lesson Two of Our Helpful Course

By RON EMERY

THERE are two ways of setting type—by machine and by hand. But since machine-set type is not likely to worry the beginner there is no need to say anything about it in this course of lessons.

INSTRUCTION

It is assumed here that your printing plant, if small, is orthodox. That is to say that you keep your type in the official cases such as were described in Lesson One. These cases are arranged in a frame—a structure either of metal or wood which is equipped with a series of divisions into which your cases easily slide.

We will assume that you have "learned your boxes"—i.e. have become familiar with the lay-out of your type cases and that you have in hand your first piece of copy—a small job to be set to a width of 3 inches, or 18 ems. What is the procedure?

PREPARATION FOR SETTING TYPE

First mount on top of the frame the case of type required. Then place your copy on the left of the upper part of the frame. Now make yourself comfortable. The foot of the case mounted on the frame should be level with your elbows, your own position central—with just the smallest inclination to the left.

This brings the copy in dead line with your eye. Do not stand with legs and feet together—the feet must be at least nine inches apart. The experienced compositor automatically takes up this standing position.

The reason for this is to give play to the body. With the feet apart, the body, when setting, goes over with the arm, and the left hand holding the stick can follow without causing any movement of the feet. Relaxation of the body and legs plays a great part in the powers of concentration when engaged in "solid" setting.

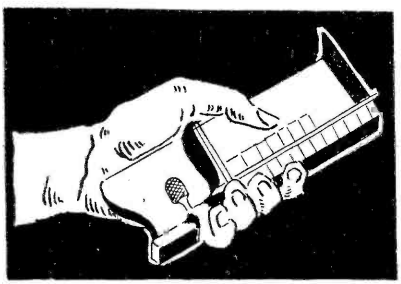
Now take up the stick in the left hand. The next job is to "make up" the stick to the measure required. Assuming you have no gauges for this purpose or that your stick is not one of automatic-adjusting variety, the best way is by using em spaces from your quad box. As your measure is 18 ems you will, of course, require 18 one-em quads. Place a row of these in the stick, then tighten with the lever or screw and return the em quads to the case. The 3-inch setting rule is then placed in the stick and everything is ready for the composition.

Study your copy well. Note carefully any special instructions, such as indentations, initial letters, leading or spacing. Presuming the copy is straightforward it will start off with a normal paragraph requiring, like all new paragraphs, a capital letter for the first word and a one-em indentation. So first drop in your one-em space.

SETTING

Now get the first half-dozen words of the copy fixed firmly in your mind. You still have your stick in your left hand. With the first finger and thumb of your right hand pick up the first letter by its head, at the same time feeling for the nick with the second finger of the right hand. Now turn the letter with the nick outward and drop it into the stick by its head.

You will find yourself clumsy at first, but practice breeds confidence. Presently you will cultivate the habit which



The correct way of holding your Composing Stick.

every good compositor must possess—that of allowing your eyes to go ahead of your hands, automatically selecting your next letter as you drop the first into position. Presently, too, you will acquire such an uncanny sense of direction and distance to boxes that you will discover the whole operation becoming completely automatic.

But this is leaping ahead. Let us get back to the line we are composing.

Having set the first word you drop after it a thick space. Repeat this process after every word until you come to the end of the line—the line ending, of course, with a complete word or a syllable of a word which lends itself to hyphenation.

If the line is loose you must tighten it by adding other spaces (middles or thins) to the thicks already in position or perhaps by changing the thicks to en quads or adding another thick. Never leave a line loose, otherwise it is bound to slip when it is lifted from the stick. Or, if not then, when you come to lock up in chase.

If the line is too tight you must reduce your spacing between words, changing your thicks for middles or thins where necessary.

Do not *ram* home spaces in your endeavours to tighten the line. This will cause it to "spring" and perhaps to pie and in any case will make it difficult to lift from the stick.

SPACING

Before we leave our first line a few observations on the subject of elementary spacing are called for.

Spacing is itself an art which will probably be dealt with more exhaustively later ; but a few simple rules must be given at once. It is not necessary that spacing between words should be exactly the same in every case—the great point is to give the impression that it is exactly the same. Words ending with letters which slope away from the space such as y, w, v, etc., may conveniently be given a little less space than others ; the space following a comma should also be slightly less than others.

But words ending in letters with upright strokes such as d and l can safely be accommodated with slightly more space. Between sentences—i.e. after a full point—the orthodox practice is to insert an em quad. This, however, may be varied according to the setter's requirements—the em may be either reduced or added to, as the case may be.

You should know the spaces in your case and their values. These are :

Thin space	5 to the em
Middle „	4 to the em
Thick „	3 to the em
En quad	2 to the em

There are also hair spaces which are very thin and brittle and are used only in very short measures—as, for instance, setting round blocks—or when slight spacing between letters is required. These vary from about 8 or 12 to the em.

LIFTING

Now let us return to the line we have already set in the stick. Having assured yourself that it corresponds with the copy in front of you and is spaced correctly, you now lift the setting rule by its "nose" and place it against the

set line in readiness to receive line No. 2. This should be composed as you composed the first line, allowing the stick to follow the hand which is picking up the letters. Follow on with lines Nos. 3, 4, 5 and so on until you have filled your stick two-thirds full.

I recommend no more than two-thirds for a beginner. A full stick (which you will tackle without thinking later on) is apt to be unwieldy for a start. Now comes the rather anxious business of "lifting" the type from the stick and placing it on the galley; but this need cause you no undue worry if you exercise due care.

Slip an 18-em lead or clump behind the first line in the stick. As you already have your setting rule at the bottom of the matter your composition is now supported top and bottom. Place the stick on the front of the case and now, with both hands, firmly grip the type, the thumbs against the lead clump at the top; the forefingers against the setting rule and the two second fingers pressing at the sides of the type.

Squeeze firmly until you feel you have a secure overall grip; then, taking care to maintain pressure on all sides, lift the type away from you until it is out of the stick. Hold upright, with the setting rule parallel with the floor, move over to the galley and gently place the type in the galley's top left-hand corner. Now proceed to set the rest of the copy, adding each completed stickful to the matter on the galley. When at last the job is complete tie up (in the manner described in Lesson One) and proof.

EMERGENCY PROOFING

A proof is the first inked impression of your composition. How you proof depends, of course, upon the resources of your plant. There are one or two ways employed by the small printer. He may proof by hand pressure, on a proof press, or straight from the machine. Later special instructions on proofing will appear in "Printcraft" and meantime I am informed by your editor that an article on how to make your own proof press is in the course of preparation.

Failing other means, however, the hand-pressure method is the one I have found most suitable. It is extremely

/	Delete, meaning "take out."	9
/	Delete and leave space.	#
⊏	Commence new paragraph.	n.p.
≡	Capital letters required here.	caps
=	Small capitals required here.	s.c
⊼	Raise lines as indicated.	⊼
⊻	Lower lines as indicated.	⊻
⌒	Close up—take out space.	⌒
⌊⌋	Spacing must be made equal.	eq #
⅄	Insert space here.	#
⅁	Transpose letters or words.	trs.
~	Words to be italicised.	ital
ⓞ	Encircle—wrong fount.	w f
ⓠ	Encircle—letter damaged.	×
ⓞ	Encircle—letter inverted.	ꝺ
⅄	Copy left out.	out see copy
⊐	Indent one em.	□⅄
⊐⊐	Indent two ems.	□□⅄
‖	Correct vertical alignment.	‖
=	Lines to be straightened.	=
⌷	Space showing—push down.	⌷
⌒	No fresh paragraph required.	run on
⅄	Insert apostrophe.	❜
⅄⅄	Insert single quotations.	❛❜
⅄⅄	Insert double quotations.	❝❞
⅄	Insert full stop.	⊙
⅄	Insert comma.	⅄
⅄	Insert question mark.	?⅄
⅄	Insert exclamation mark.	!⅄
⅄	Insert hyphen.	⅄
—	Underline matter indicated.	insert rule
ⓞ	Lower-case letter required.	l.c
~	Bold type required.	bold
⊐	Move to the left.	⊏
⊏	Move to the right.	⊐
⊏⊐	Place in central position.	centre
⅄⅄	Insert parentheses.	( )
⅄⅄	Insert square brackets.	[ ]
⅄	Insert shilling stroke.	/

PROOF CORRECTIONS.

Some of the signs used. Those on the left are the marks to be inserted in the text. On the right are the marginal marks.

simple. Roughly wedge the matter into one corner of the galley so as to hold it firm, remove the galley to the stone or table or some other flat surface, and ink the surface of the type. Now damp your proof paper and place carefully upon the inked surface. On top of the proof paper place a thickness of blanket or some similar material. Now flatten the left hand and place the palm on top of the blanket. Place the right hand on top of the left and press firmly and vertically downwards.

Be careful, however, not to move either hand during the contact. If you do you may disturb or break off the heads of the type at the sides of the job and will almost certainly get a smudged proof. Pressure should be maintained only for a second or so. Then remove the hands and pull off the proof.

This is by no means an ideal way of taking a proof. I suggest it only as an expedient.

PROOF CORRECTION

This is an important branch of the printer's art and it is essential the beginner should grasp its principles. Proofs are taken in order to correct errors such as bad type face, irregular alignment, wrong punctuation, spelling, spacing, etc.

In correcting proofs special signs are employed. There are two sets of them —the signs used in the actual text or type-matter ; the signs used in the margins of the proof. The text-matter signs indicate the wrong letter, word, space, etc., to which attention is to be given, the marginal indicates what is to be done to set it right.

A list of the most common symbols are on page 25 and should be studied. At a later stage I shall give you the more difficult signs. Meantime I recommend you to read the article on the same subject in the " Small Printer's Handbook", wherein you will find an instructive example of a corrected proof.

Apart from knowing the signs these wo simple Proof Correcting Rules should help you.

1. Mark clearly and keep the signs in your text in alignment with your marginal signs.

(*Concluded at foot of next column*)

ANSWERS TO PRINTER'S QUIZ

(*See page 22*)

1. *Digestible Sacrilegious Iridescent Ignitible* (or *-able*) *Exaggerate Daguerreotype Rhododendron Dextrous* (or *-erous*) *Toboggan Centenary.*

2. (*a*) *. . will submit the same for your approval.* (*b*) *I did not think to write to you sooner . . .* (*c*) *We find the choice preferable . . .* (*d*) *These items are unique . . .* (*e*) *We hope to send goods quickly . . .*

3. (*a*) *That must be the Robinsons' order.* (*b*) *Didn't I say it was hers ?* (*c*) *Here is its other half.* (*d*) *Surely this one is Jane's ?* (*e*) *Many happy returns on Tom's birthday.*

4. *Opaque Base Smooth Repel* (*or Repulse*) *Doubt Demand Entry Pain Poverty Folly.*

5. *Courts martial Eskimos* (*preferable to Esquimaux*) *Innings Pence* (*pennies only when referred to as separate objects*) *Ignoramus* (*there is no plural*) *Indexes* (*indices is used more scientifically*) *Mumps Bases* (*the e should be sounded ee*) *Octopuses* (*not octopi*) *Lords Justices.*

6. (*a*) *Namely.* (*b*) *At pleasure.* (*c*) *That is :* (*d*) *Therefore.* (*e*) *For.* (*f*) *Against.*

7. (*a*) *Errors and Omissions Excepted.* (*b*) *Doctor of Philosophy.* (*c*) *Fellow of the Zoological Society.* (*d*) *Cash with Order.* (6) *Most Worthy Grand Master.*

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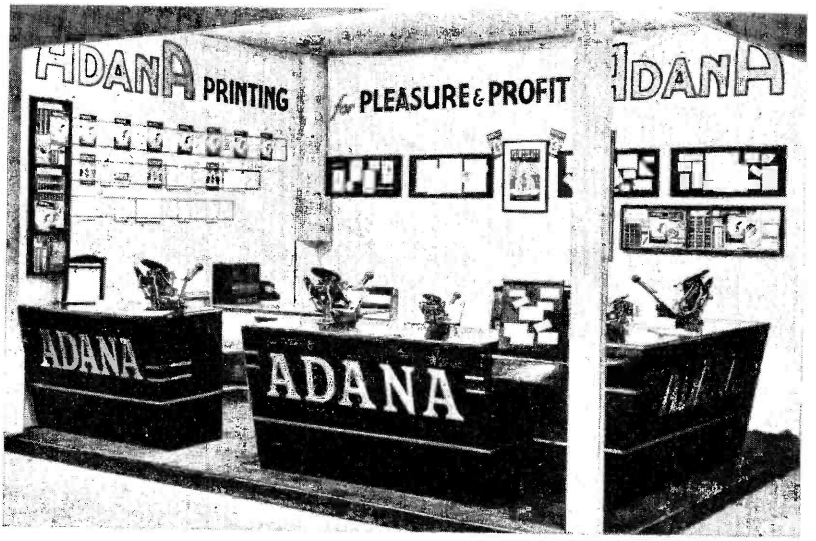
2. If there are three or more corrections in one line they must be divided in the margins from left to right. That is to say, Correction No. 1 will be marked on the left of the line ; correction No. 2 on the right of the line ; No. 3 on the left again ; No. 4 on the right, and so on. Separate each mark with a diagonal stroke ; thus / .

(*Lesson 3 will appear in the next issue.*)

THE GALLEY SLAVES

By H. Puttick



ADANA AT OLYMPIA

By A. HOLMES

THIS picture of our stand at this year's Ideal Home Exhibition looks tranquil enough, taken as it was one morning before the doors were open, but it was a hectic month for our staff and that includes me. Apart from a hoarse voice and heavy eyelids, what have I gleaned? I know Printcraft's readers will be interested.

For a great part of the time visitors to the stand were two deep and kept us constantly on our toes. Sometimes of an evening we had to marshal a volunteer force as a relief. Gratifying? Yes! We were happy to demonstrate what our machines could do—and we did it. But now, I raise my hat to *you*. By you, I mean those of you who contributed those exceptionally fine pieces of print which we proudly exhibited—not as our own specimens but as the work of our amateur friends. One proud panel showed a fine series of Christmas cards executed on one of our No. 2 High Speed machines by a disabled man in an occupational therapy centre. Our thanks—and our congratulations—are due to Reader W. P. Berner, for these. The most critical visitors, of course, were the professional printers, and many of these generously praised the quality of the work. Imagine! It had to be a perfect print each time, straight off the platen into the interested one's hand.

One little incident will interest those who read the first issue of "Printcraft." You remember the cover, depicting early Chinese printing? A Chinese visitor to the stand was chatting to one of our staff and asked how we got such a true representation. He told us that even to this day in some remote parts of that wonderful and cultured land you will see the same methods employed. That's a bouquet to the artist who, by the way, is Mr. E. Cumberland Owen, well known in the commercial art world.

Well, we met many hundreds of Adana enthusiasts. Some came for advice—which they got, of course—others made suggestions. All were very interesting and I look forward to meeting them—and others—again at the British Industries Fair at Olympia this month.

WHETHER it is the New Look which is doing it, or whether it is good, old-fashioned Spring, I don't know. But certainly there has been a tremendous rush just lately in my husband's shop for headed notepaper.

WOMAN'S POINT

Quite apart from the business it brings to Jim, I must say I'm delighted to see this interest women are taking in things connected with the home. We've been too drearily content to put up with any old thing too long, in my opinion—including scrappy bits of notepaper and oddly-assorted envelopes.

Letter-writing is so much more of a pleasure, I always think, when you have an attractive paper to write on. It needn't be expensive, either, to use paper and envelopes that fit and match, in a conservative white or pleasing colour.

Myself, I'm all for colour in correspondence as long as the colours are not too bold or crude.

Jim consulted me about some rather vivid blue notepaper that he was going to " head " for one of our old customers. Did I think it was too—er—bright ? Would the finished effect be—er—a bit —er—cheap ? He was anxious to carry out instructions, but wanted to make sure that the finished work would please.

" It would certainly look a bit violent if you used a scarlet ink on the address heading," I admitted. " But if you use grey— "

Jim jumped at the idea at once, and we both agreed that while contrast is always necessary, some colour-combinations are just not right when it comes to private notepaper headings, which are such personal things, reflecting the good taste and charm of the writer.

Any colour ink is good on white paper, of course. For classic elegance and stylish simplicity there is nothing to beat a black script or italic, in my opinion—especially if the notepaper belongs to someone who is no longer young.

MRS. PRINTER TALKS

One Wife to Another

By WYNNE CHESTER

Blue print on white is charming for the young-married, and red or green on white for the girl who likes to change her notepaper when she changes her hat or her mood.

An attractive envelope that awaited me the other morning on the hall mat was in soft maize yellow. It was from a young niece of mine, I realised as soon as I saw the sprawly writing. The address on the notepaper was printed in brown, and it looked most effective —especially as she had used brown ink in which to write the letter ! A bit unusual, I admit—but so refreshing, and conveying so easily the high-spirited nature of my gay-hearted niece.

Pink, from palest rose to deep salmon or cyclamen, is a favourite colour with lots of women. I've seen green headings on these, also red. Green wasn't bad, but red was horrid. Blue is quite definitely best with pink (unless you like to remain true to always-correct black).

On pale green paper, red print can look quite well, and also on azure blue. Green ink is at its best with pale yellows or with parchment shades as background.

Green-toned paper can carry brown or black headings with distinction. I would always suggest avoiding green ink on green paper, however, for this can sometimes look insipid.

This all sounds rather like one of those make-up colour beauty charts we can't resist studying—even if we haven't the faintest intention of buying a new lipstick. And perhaps some of you may think I take this business of colour-harmony in notepaper and printed address too seriously.

But to many women it IS a serious business, for we wives are generally the letter-writers of the family—whatever the men-folk like to think about it. And if a woman is going to spend money on notepaper, and headed notepaper at that, she wants it to reflect credit to her taste and be a compliment to the friends to whom she writes.

Now let me thank all the Misses and Miss Printers who wrote to me as a result of my article in No. 1 of "Printcraft." It was a delight to hear from you all. I hope you will write again.

'Plums from the Pie'

". . . of Westcliff-on-Sea was fined £500 or nine months at Hastings . . ." —*London Evening paper.*

"Mother of Three has 21st Birthday Party."—*Daily paper.*

"A spat to catch a mackerell . . ." —*Woman's paper.*

"The Home Secretary has a big sob on hand . . ."—*Sunday paper.*

". . . is inviting a few fiends to a party . . ." —*Invitation card received by "Printcraft."*

". . . among the famous film scars just arrived from the States . . ." —*Daily paper.*

"This is my little bother," Maisie said, proudly introducing Jim." —*Girls' paper.*

"Mother swept vigorously with the new groom."—*Woman's paper.*

"Only the Chinese know how to fake tea properly." —*Trade paper.*

". . . a typsical English gentleman . . ."—*Woman's paper.*

LAY-OUT & DESIGN (2)—(*Continued from page 17*)

something is emphasised in bold type that immediately catches the eye. The reader is at once interested and therefore reads the rest of the copy. By the time he has finished it the customer knows all that John Smith intends him to know. Typographically Figure 2 may not be so pleasing as Figure 1. No. 1, nevertheless, is the failure in this case because it has not punched home to the reader the invitation which the writer intended to be put over.

Each piece of similar copy that comes into your hands will also have a message —even trivial things like visiting and business cards, about which we shall talk later. It is your duty, through your typography, to see that the message is never lost. But perhaps you don't want to wait until a customer brings you copy. Perhaps you'd like to get to grips with a job now—on your own account. Righto, then. As a spare-time test here is a piece of copy, set just as it may have been written by a customer. Call the size 3 ins. x 5 ins. and have a go at interpreting and displaying it—I'd love to see the job you make of it.

To be continued in "Printcraft" No. 3

Novice's Notebook

Helps for the Small Printer Finding His Feet

By DAVID WESLEY

DIFFICULTIES

COMPOSITION rollers have a nasty knack of collecting dust, if left only for a short time. Before any new job is embarked upon it is always advisable to wipe them over and this should be done without fail. An even better plan is to get Mrs. Printer to make a special dustproof cover which should be slipped over the rollers as soon as they have been cleaned from the last job.

Matter to be kept standing for any length of time should not be stored in an open rack where it will collect dust and grit. Keep it parcelled up in brown paper sealed with a proof of the matter so that it is immediately identifiable and ready for use.

It is a good plan to keep small spares and accessories of which you have a number, in glass jars rather than in boxes and parcels. The advantage of this system is (1) you are able instantly to recognise the parts you require ; (2) you are hardly likely to allow yourself to run out of such parts when they are constantly on view.

After imposing in chase lift the forme about half an inch by one end and lightly shake. Then repeat the process by lifting the opposite end. This will reveal any loose sorts or spaces. But be careful, please, not to lift the forme *too* high. If you do you may have whole lines falling out.

"Hair" — the thinnest of thin spaces —are, fortunately, not often required. Nowadays they are practically impossible to obtain. But occasionally they are necessary, as you have no doubt discovered. If you have no hair spaces it is quite easy to make a few, using thin card or paper for the purpose.

Here is a practice by no means recommended but which might solve a problem when you are desperately up against it.

It often happens, in setting a one-word display line, that the line turns out to be slightly longer than the measure you must work to. The right thing to do, if it is possible, is, of course, to alter the measure. If it is not possible take out the fattest letter and rub down its sides on the emery board.

Lye is the recognised type cleaner but this, again, is not always obtainable. Equally efficacious, however, is Turps Substitute which is not now in short supply and is sold by your local oil and colour merchant.

Spaces—particularly en and em—have a habit of riding up to type-high level when planed on the stone. Inspect the forme thoroughly before removing it and to make positively certain run your finger carefully over its underside when indentations betraying rising spaces will be immediately detected.

Don't throw away battered or worn-out type. Cut off the heads and use them as bastard spaces. But do be careful not to get them mixed up with the official spaces, please ! A good plan is to keep them in a specially isolated section in the quad box.

HALF-TONE BLOCKS

Briefly and Simply Explained

THE half-tone block is the result of a mechanical photo-engraving process by which photographs, wash-drawings and paintings are reproduced as printed pictures. It is a German invention of the year 1882 and its method is to "break" up the image into dots.

The original is first photographed. Before the picture is actually taken, however, a glass screen covered with lines resembling close lattice work is placed between the lens and the sensitised plate in the camera. Powerful light is, of course, necessary to the photographing and when the negative is produced it is found to be stippled with dots—large dots in the lighter parts of the picture; small dots in the denser areas.

The dot effect is, of course, caused by the glass screen. Viewed under a powerful magnifying glass it looks rather like a honeycomb.

There are several of these screens. They range from 45 to 225 or more. These figures—45-225—relate to the number of dots to the inch; thus is determined the difference between a "coarse" screen—say 45 to 65 dots to the inch; a medium screen—say 65 to 120; and a "fine" screen.

PROCESS

A print is then made from the negative on to the metal plate which has been treated with a sensitising solution. Once the metal plate has received the print on its surface it is placed in a bath of cold water. This dissolves the covering solution and leaves the image on the face of the metal. The plate is then treated with a violet aniline dye which brings the image and detail out more clearly.

A "burning in" treatment follows with the plate being held over a flame of sufficient heat to convert the remaining solution on the dots into a hard enamel capable of resisting the etching powers of perchloride of iron (on copper) or nitric acid (on zinc). At this stage the plate has become "flat etched" and has to go through further processes to become "fine-etched"—in other words to receive a complete finish.

The small printer may think to himself: "How does all this concern me?" It concerns him a great deal! Supposing a customer brings him a half-tone block which he wishes to be used in a leaflet or programme? The printer must have some knowledge of the screening value in order to purchase suitable paper. A block with a close screen can be ruined if printed on a coarse paper; it will look silly if it is an open-screened block printed on art paper.

Or supposing the printer receives copy accompanied by a wash drawing or photograph of which a block is to be made? He studies the quality of the job, gets a sample of what he considers a suitable paper, and then proceeds to the block-maker (with a specimen of the paper)—who will give him advice on the subject of the best screen ruling to suit the paper he has in mind.

SINCE the publication of No. 1 of "Printcraft" many letters have reached this office asking how one can become a professional printer in the fullest sense of the word. All of them have, of course, been answered through

ON BECOMING AN APPRENTICE

A Guide to Aspirants

PROFESSIONAL

the post but seeing that there is such an enthusiastic interest in the subject your editor has asked me to write a short article about it.

I accept the commission with pleasure. Let's go.

Well, in the first place one only becomes a professional by undergoing a term of apprenticeship—but, that, of course, you already understand.

At what age does one become an apprentice? The answer is fourteen, fifteen, or, in some cases, sixteen.

To what sort of firm should the boy be apprenticed—a big one, doing printing (and probably publishing) of all kinds, or a small firm, noted for the good class of work it turns out?

Pause. Let's consider. In the small good-class firm the apprentice would certainly receive a great deal more individual attention than in the big, busy firm where the training of apprentices must be essentially of a secondary consideration. But . . .

The small good-class firm is limited in size, in plant, and in resources. The big firm, which probably prints everything from directories to handbills, has resources which are practically unlimited. If it cannot give the same careful nursing to its apprentices as the small firm, it is no less apprentice-conscious, and it makes up for its deficiencies by sending its learners to special schools or institutes in which classroom and technical instruction is of the highest.

And look what the big firm has to offer! The Process Department, where blocks of all descriptions are made; the Composing Department, embracing jobbing, bookwork, hand and machine composition; the Foundry, where stereos, electrotypes and plates are manufactured; the Machine Rooms, the Pressroom, the Warehouse, the Binding Department—what isn't there for the aspirant to see, to learn?

If the apprentice in a big firm is observant and ambitious there is no end to the knowledge he can acquire. His opportunities of gaining experiences in every typographical direction are immense.

Right then. Now what is the best sort of apprenticeship to aim at?

That depends upon the initiate himself. In print there are several. A boy can become an apprentice in the Process, in the Comps, in the Foundry or in the Machine Department. Best of all, in my opinion, is the Comps because, in this department, the tyro gets to know something about every other department in the firm. It is also the one department calculated to turn him into a first-class all-round typographer.

What is the procedure?

First, of course, the would-be apprentice has to be accepted. It is not generally easy to break into print. Most firms insist upon a personal recommendation in the first place. Apart from this, educational standard must be above the average, school character good ; intelligence (especially where writing, reading, English and arithmetic are concerned) high. Before being taken on the applicant will probably have to pass some sort of a test such as deciphering a difficult manuscript, correcting a piece of bad prose or answering a few general knowledge questions.

He is then given a probationary period of six months or so in the reading box as a "copyholder" (an upstage name for reading-boy). In this capacity he will read out original copy to the reader whose task it is to check the corresponding proof. In this way he will gain a sound knowledge of typographical errors and will also become well acquainted with the style of the house.

What's that? Simply the firm's rule for spelling words which are capable of being spelt in more ways than one (such as "realize" and "realise") ; for maintaining a rigid standard of punctuation ; for adhering to a one-style method in word composition such as "all right" for "alright."

At the end of his probationary period the newcomer will, if his record has been satisfactory, be made an apprentice. It is a simple ceremony, consisting of the signing of Indentures which bind the apprentice to the firm for seven years. After this he is put to "case" to learn the job of practical typesetting, imposing, proofing, display work, jobbing, etc.

In this he will probably find himself a member of a "ship"—otherwise a crowd of four or more journeymen compositors presided over by a senior who is known as the "cliquer." Apart from composing he will find himself required to make tea, run errands and carry messages to other working departments in the firm. Meantime he will attend evening or afternoon classes of typographical instruction. At the end of three or four years, when he has learned all he can at case, he will be given the choice of becoming either a linotype or a monotype operator.

And so, learning, learning all the time, his seven years roll on, until at last comes the day of his "bang-out," otherwise the day on which his apprenticeship ends. On this day his indentures are handed back to him while his fellow apprentices make a great to-do of the occasion by carrying him shoulder high from the manager's office and, laying hands on galleys, chases or anything else that will make a row, give him a rousing send off to celebrate his journeymanship.

Oh yes ! It's great to be an apprentice and that "banging out" is the day which will stand among the most vivid in his mind for the rest of his life.

To all boys who are thinking of taking the plunge into professional print I say—"Good luck." Seven happy and fascinating years lie before you.

"PRINTCRAFT" No. 3

(OUT IN AUGUST)

is of special interest to handymen and to all Small Printers who wish to add to their equipment at the smallest possible cost.

It will tell you

HOW TO MAKE YOUR OWN PROOF-PRESS

HOW TO MAKE A SERVICEABLE CUTTER

HOW TO MAKE A FRISKET

It will give you a wealth of good advice on other typographical subjects and will again solve many of your posers and problems.

No. 3 is the most practical and helpful issue which has yet been published and certainly lives up to its description of

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