

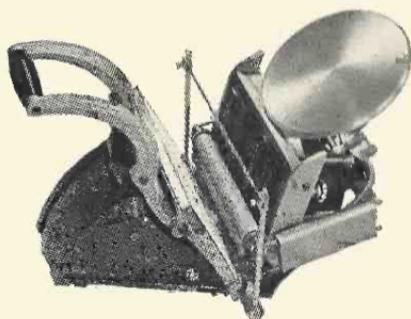


**De ea parte operis qua dicitur
 unum civitatem id est celestis et
 terrene nuda et fines in apertis
 demonstrari. Capitulum. i**



Civitatem dei
 dicimus cuius ea scriptura testis est
 que non fortitudo motibus animorum
 sed plane summe dispositione providencie sup
 omniu generu litteras oia sibi genera ingenioru
 humanor divina excellens auctoritate subiecit
 ubi quippe scriptum est gloriosa dicta sunt de
 civitas dei. Et in alio psalmo legimus. Mag

nus dominus et laudabilis nimis. in civitate dei nri in monte sancto eius. dilatans exultationes uniuersę terre. Et paulo post in eodem psalmo. Sicut audivimus ita et vidimus in civitate dñi iustitiam in civitate dei nri. deus edificavit eam in eternu. Item in alio. fluminis impetus sanctificat civitatem dei. sanctificavit tabernaculu suu altissimus. deus in medio eius non commovebitur. his itaq; huiusmodi testimoniis que omnia commemorare longum est: didicimus esse quadam civitate dei. cuius aures esse cum cupimus illo amore quem nobis illius conditor inspiravit. hinc conditori sancte civitatis: aures terrene civitatis deos suos preferunt ignorantes cum deum esse deorum fallor: hoc est impiorum et superborum. qui eius incommutabili omnibusque communi luce privati:



THE " EIGHT - FIVE "

A New Adana Hand-press for £16 - 16s. - 0d.!

AT the recent British Industries Fair we had the proud pleasure of presenting and demonstrating the new ADANA EIGHT-FIVE. Both printers and public enthusiastically acclaimed this new machine with its many novel features and its remarkably low price. Our whole object in producing it was to provide the small printer with a machine that (1) will produce high-quality work, (2) stand up to the test of wear and time (3) at the cheapest possible price. In offering the Eight-Five for the figure of £16 16s. we believe we have produced the cheapest platen of its kind in the world, combining as it does expert engineering, perfect performance and an extremely pleasant appearance.

One of our objects has been to streamline the design so as to make the machine compact and space-saving. This does not in any way interfere with its efficiency. Thus the new gripper device is

made with the novel feature of being interior spring loaded and the roller carriages are totally enclosed.

The diameter of the disc, $8\frac{1}{2}$ ins., gives ample ink to the edge of the forme.

The chase is of the slip-in variety, and is held firmly in position by a ball-bearing catch. Thus no screws are necessary to lock it into position. Registration with this is perfect. The inside measurement of the chase is $8" \times 5"$.

The action of the machine is a smooth-flowing one. We feel that all its users will be more than satisfied.

Very reasonable deferred payments have been arranged. Particulars of these and of the machine itself will gladly be sent on request. It is likely that demand will outstrip production in the early stages so we ask all intending purchasers not to be disappointed if a short space of time elapses before they are supplied.

8-5

**A HIGH-CLASS MACHINE
AT A VERY LOW PRICE**

8-5

PRINTCRAFT

and
THE MAGAZINE PUBLISHER

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No. 22

June, 1953

Pleasant People: An Appreciation

IN the hustle and bustle of this modern age kindness and courtesy have been forced into a very remote back seat. The "pleases", "thank-you's", "will-you-take-my-seat-miss?" and all those other polite niceties which once made human relationships so much more desirable, seem rapidly to be vanishing into the land of Forgotten Things. With the quickening of life's pace this is, I suppose, inevitable. Nevertheless, it is a saddening fact to have to face.

But there are still pleasant places where courtesy, thoughtfulness and an ever-ready desire to help can be found. I feel prompted here to put on record my deep gratitude to one group of such places. These are the museums of London.

In varying capacities I have been dealing with the museums, on and off, since I was a boy in my teens. I must have paid hundreds of visits to each of them. Nearly always I have required something of an urgent nature, and I must, many times, have earned the right to be snubbed. But never once—never *once*, let me repeat—have I encountered anything but the warmest good nature, sympathetic interest and an immediate willingness to help to solve whatever problem might have been on my mind.

The latest instance is connected

with the present cover of *Printcraft*. For this issue I required something a bit more colourful than what we have been having recently. I first sought the help of the Victoria and Albert Museum in Kensington. Unfortunately they had no colour-work available but helpfully I was invited to go and see Mr. So-and-so at the museum in Bloomsbury.

I went. In less than an hour, helped by the heads of three departments, I came out with a suitable cover subject tucked under my arm. I had entered the museum anxious and uncertain: I left serene and snug, feeling the world to be a much more charming place by reason of the kindly attention which, as usual, I had received.

There is no hustle and bustle in the British Museum. From commissionaire to keeper, courtesy is the watchword. With courtesy is linked a quiet, smooth efficiency which is, perhaps, more certain of getting things done than all the haste and scurry in the hurly-burly world outside.

OUR COVER

Having paid this small compliment to the institutions which have been of such great assistance to our magazine, let me now talk of the cover itself. This is an imposing example of illuminated manuscript taken from one of the ancient MS. books of which you have heard so much from



SOME RECENT SPECIMENS RECEIVED FROM READERS —————→
(Read from left to right)

Top row : M. A. BICKERTON, London, W.2 ; R. BROWNE, Monarch Printers, Eastbourne ;
PAUL CHAPIN SQUIRE, Nice, France.

2nd row : Two pages of a 3-leaved folder by R. and S. E. PERRINS, Birmingham.

3rd and 4th row : (Stoneycroft Sunday School) Mrs. M. W. WOODHOUSE, Huyton, Lancs. (H.M.S. Armada) D. W. WOOLTON, P.O. (Girls' Life Brigade) A. J. COX, Tottenham, N.17. (Prayer for Peace) LESLIE C. DAVEY, Hounslow, Middlesex. (T.B.A. Recreation Club) CLIFFORD NIELD, Leigh, Lancs.

Bottom row : First two specimens by A. TAYLOR, Selby, Yorks ; Third by R. D. SAVAGE, Folkestone.

Vincent Armitage, Leonard Drury and others. It is reproduced from a lithographic plate in the book, *Schools of Illumination*, published by the British Museum and sold at the counter of that establishment for 25s. It was originally in France some fifty or sixty years before Johann Gutenberg cut his punches for the first set of movable types which saw the start of the new and revolutionary art of reproduction by printing.

The original is in full colour, very beautifully high-lighted with fillings and ornamentations in burnished gold. Because of technical difficulties in the making of the blocks we were, unfortunately, unable to reproduce the gold, so have used a yellow ochre ink in its place.

THE LAST CHANCE

I would like to remind all who may be interested that our Schools Magazine Competition definitely closes on July

6th. This means that you have only about three weeks left in which to try to win a free Adana printing machine and the necessary accessories for your school. The Application Form was printed in *Printcraft* No. 20 and the Entry Form in No. 21. Both these forms must now be submitted with two copies of the magazine.

If you have lost or mislaid the forms please write to

Printcraft Schools Magazine Competition,

The Adana Organisation,

15-18, Church Street,

Twickenham,

Middlesex.

The judging will commence immediately after the closing date and we hope that we shall be able to publish the full results in our next issue.

AWARD OF MERIT

to Monarch Printers,

22, Bedford Grove,

Eastbourne

FOR THE BEST TYPOGRAPHICAL SPECIMEN SUBMITTED DURING
THE PERIOD OF : —

March, 1953 —

— May, 1953

PRINTCRAFT



The present trend towards specialisation and the formation of larger and larger units both for manufacturers and selling may well result in many medium and large printing businesses having to either amalgamate for economical working or close down. Nevertheless, the clever and alert small printer will always find a market for his products among the personal service trades such as hairdressing, watch and electrical repairing, the local nurserymen, shopkeepers and the local sports and social clubs.

As most of my readers have quite good grounds for feeling much more secure than many of the larger firms (providing they study their job and their customers) it may be interesting to examine some of the recent developments in methods and techniques and to see which prosper and which disappear.

In the early 1930's there was a new process of "dry" lithography known as the Pantone process. It enabled fine-screen half-tone blocks to be printed on either a letterpress platen machine or an ordinary lithographic machine. It was a revo-

Typographic Trial and Trend in this New

Keen printers take a vivid interest in the history and development of their craft. Here "Printcraft" sets out to examine what is new in typographical methods, machines and inventions and to draw some cautious conclusions as to how they will affect the small printer of the future

WHEN Queen Elizabeth I came to the throne, the art of printing had been established for over a century. Early difficulties had then been overcome though little progress was made during the next two centuries. The value of printing for producing comparatively large editions of books and for the rapid distribution of news was fully realised, and quite probably master printers were happy in their secure possession of a virtual monopoly. In these circumstances there was, obviously, no need for any feverish desire for new methods or machinery.

In this present year of the Coronation of our young Queen Elizabeth II there are so many new methods and machines and so much research being undertaken by machine, paper, ink, roller makers and typefounders that only a very bold or foolish man would venture to predict the direction in which the greatest developments will take place during the next half-century. The only forecast that can be made with any safety is that good class small firms are the least likely to be affected by the changes that time will bring.

lutionary process and appeared to work perfectly.

Great advantages were offered to both letterpress and lithographic printers, as it cut out the hazards of the damping system in litho and make-ready in letterpress while yielding a high quality of production on comparatively poor quality papers. Yet within two or three years it completely disappeared.

The plates were made of one metal, thinly coated with another and after a photographic image was printed down on to the plate, the top metal was etched away so that the metal below showed through. The image, therefore, was a picture composed of two separate metals, one of which repelled mercury, while the other attracted it.

Special ink containing mercury was used in printing, and when the plate was rolled it picked up ink in the image portions and rejected it over the rest of its area. An impression heavy enough to squash the grain of the paper was applied and the picture was ready to run.

I was keenly interested in the project and was very disappointed when the paten-

tees were forced to close down. The trouble appeared to be the Board of Trade restrictions on the use of mercury in industry and the fact that the mercury would react with many coloured printing ink pigments.

After another 25 years of research new types of bi-metallic plates have recently been put on the market. I understand they are being used with considerable success by several firms of lithographers.

It is probable that the present automatic small cylinders and platens have already reached their highest economic speeds. A speed of 5,000 impressions per hour is ample for short runs and developments will most likely be concentrated on cutting down the times for make-ready, washing up and making adjustments for different sizes and thicknesses of stock.

Spray guns and infra-red drying methods; new types of ink; and pre-make-ready methods are capable of further development and will help to increase the production of any existing

Elizabethan Age

machines. For example, the production of Adana machines might well be increased two- or threefold by faster methods of change-over from one job to the next when runs vary from 50 to 500 impressions.

Attempts have been made at constructing small letterpress rotary machines, such as the American "Whale" press, for general jobbing. This machine was in the experimental production stage just before the war and at a speed of 5,000 revolutions per hour, working stereotypes three or four up, it was possible to turn out quarto headings at the rate of 15,000 an hour; while octavos could be printed at 20,000 an hour. The use of these machines would be limited as few firms buy stationery in lots of more than 20,000 sheets at one time.

Great developments may be expected in the field of photo-typesetting. These are of interest, but will probably have little effect on the jobbing trade. They will mainly affect book production and are aimed to serve the lithographic and photogravure printers, rather than the letterpress man.

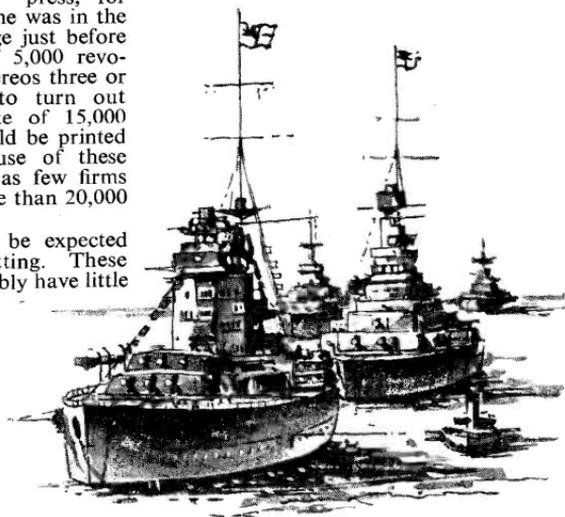
Several methods of approach have been tried and successes scored with widely differing ideas. Perhaps it would be of interest to briefly

describe one or two typical machines from each class.

Justewriter. This is an American invention consisting of two small machines resembling typewriters. On one—the trial copy machine—the copy is typed out in unjustified lines as on an ordinary typewriter, but in addition it records on a narrow tape by means of punched holes information indicating the exact space needed to justify the line in addition to the letter code. The copy is typed out in the usual way and a visual record for proof reading and the code strip are produced simultaneously.

After reading the proof, the narrow tape is fed into the justifying machine. This machine is power-driven and automatically types out the original typed copy spaced out to form a properly justified page. The product is a clear, opaque, justified page in 12-pt. size ready for pasting up into a sheet of 4, 8 or 16 pages, or whatever is desired. This is then photographed in a process camera and a line block or photo-litho plate prepared.

Vari typer. Owing to a strike of compositors in Chicago in 1947, the *Chicago Tribune*, a 48-page newspaper, was faced with complete stoppage. The text-matter of this large daily was produced for well over a year by ordinary typists. The copy was set on ordinary typewriters; the number of spaces left at the end of each line were counted and typed in the margin. The copy was then transferred to a Vari typer, the spacing adjustment made and the line retyped. The finished pages were then photographed, line blocks made, rotary stereotypes cast and the paper printed



in the usual way. This method has been used in this country for the production of a complex book on organic chemistry.

Higonnet-Moyroud Photo-Type Composing Machine. This new machine of the Graphic Arts Research Foundation Inc. of Cambridge, Mass., U.S.A., differs from the previous ones, because in addition to text setting, it can be used for fairly complex display setting in a number of faces. The machine is quite small and weighs a little over four hundredweights.

Occupying no more space than a typist's desk, it can mix up to 16 different typefaces in a variety of sizes, giving the equivalent of 128 magazines on a slug-setting machine. In addition to justifying lines to a set measure for book or periodical work, the lengths of lines can be varied at will to run round the contours of illustrations.

Another important feature is that certain capital letters which will not fit snugly in metal type can be made to overlap in this new machine. For example, the word AWAY, in large caps, looks awful, and even letter spacing does not help. In the new machine these letters can be closed up automatically. The product of the machine is in the form of either a photographic positive or negative, depending on the purpose for which it is required.

Electronics have many control applications in new printing methods, but perhaps the most startling are the attempts at electronographic printing. So far there are technical difficulties to be solved before

really high quality results can be obtained. When the solutions are found, electronics may well completely revolutionise our conception of printing.

In general, if an image in an electrical conducting material can be mounted on a non-conducting material and placed in front of some device for turning the image into an electro-magnet, and a web of paper is arranged a short distance from the image carrier, in front of a much more powerful apparatus for producing electro-magnetic forces, and a hopper of some powdered pigment is arranged above the image, all the theoretical factors are in place for printing without either ink, or drying problems, and capable of incredible speed.

The procedure, in slow motion, is that when a potential of, say, 2,000 volts is applied behind the image and a portion of the pigment powder allowed to fall, a film of the powder will adhere to the image, which could be a page of type or an illustration.

If a potential of, say, 6,000 volts is applied behind the plain paper at the same instant that the potential behind the image is cut off, the powder will leap the gap and be carried into the grain of the paper. Experiments on these lines have already been carried out with fair success and even smoke has been used as a pigment in place of powder to give fine grain effects to photographic illustrations. As no pressure is used, no very robust construction is required. Electronic controls work with the speed of light, and the powder, or smoke particle pigments require no drying, so the possibilities in this line of research are tremendous.

On the other hand, high-tension electrical and electronic control apparatus is somewhat expensive and the speed at which such a press must work tends to rule it out for all but the longest runs. It would be useless for the small consumer's purposes, although it might be ideal for newspaper and large-circulation journal printing.

In the next issue, I hope to deal with some British developments in phototypesetting and modern time-saving equipment that may be within reach of my readers.

In No. 23 of "Printcraft" we shall introduce you to Professor Printcraft, one of the leading typographical scientists of the modern age, who will tell you some startling things about the type, tools and the various components which you, as a small printer, use every day. For reasons which will be made plain later, we are not revealing the Professor's identity at the moment, but you may receive a clue when we tell you that, among others, he is entitled to the following distinctions—B.Sc., F.R.S.A., F.C.S., M.R.I.

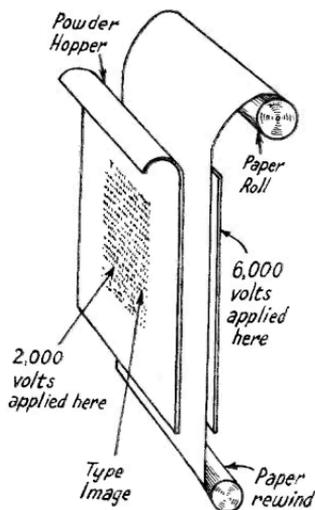


Diagram showing theoretical apparatus for electronographic printing unit

If you have a hint or have invented a gadget which you think may help your fellow craftsmen you are invited to write it up and contribute it to this feature.

Payment of 4/- per 100 words is made for each item used. Diagrams and sketches are paid for additionally, but **MUST** be drawn in **BLACK INK** (Indian for preference).

Hints concerning additions or alterations to Adana machines are published purely for the interest of other owners of these machines. It should be pointed out, however, that the hints have not been verified by Adana and are not necessarily approved by them.

No hint can be guaranteed publication in any particular issue.

THE ADANA AS A CUTTER

In preparing Christmas cards I had often envied the professional article in which a portion was cut and folded back to reveal part of the illustration inside. I thought expensive machinery would be needed to produce this effect. Now I have produced it at a cost of just nothing.

I got an old safety-razor blade (the "Valet" type, or makes with one cutting edge are best) and placed it upright in the chase with two thick pieces of furniture holding it in position. The cutting edge of the blade came nicely above the furniture. I locked up the chase and put it in my Adana. The blade was not type-high so I had to extend the screws at the back as far as possible and pack a good deal of hard card on the platen under the draw-sheet. Using no rollers or ink I found this improvised cutter cut sharply and cleanly through paper or card. It was an easy matter to arrange four blades in a square to cut out a panel, or three in the form of a letter "H" on its side to give me a little window that could be folded back to show the printing on the inside of the card. Two or three blades placed side by side made a handy guillotine for cutting cards to smaller sizes.

It is difficult to break a tempered razor blade to a smaller size, but with pliers I break it as near to the size as I can and fit the design of the card to suit the cut-away portion. In using a broken blade for a smaller oblong (it is difficult to get two blades broken to the same size), I run the cards through twice, taking great care with the register, and turning the card upside-down.

I also put a bit of stiff card or thin wood at the back of the blade, lest it damage the bed of the machine.

Another little hint: I set four setting-rules, sharp side up, in a rectangle, a half-inch smaller than the face of the finished card. With a soft backing to the platen and without rollers or ink I impress an oblong on the card. Inside this oblong I print my block and greetings afterwards.

P R I N T H I N T S



Two sets of setting-rules are required or else two separate imprintings, for the opposite sides of the rectangle must be equal and setting rules in a set are of different sizes. Care must be taken in adjusting the pressure, else too deep an impression at one end of the rectangle will result.

—S. Lee (Edinburgh).

PUNCHING HOLES

To improve the quality of certain folded cards—a bow of ribbon is the answer. Try to blend the colour of the ribbon with the picture. A white embossed card with gold and blue printing would look best with blue ribbon.

Now for the punching of the holes to accommodate the ribbon. Materials required:—A flat piece of soft wood, a hammer and a three-inch nail with the point filed down halfway.

First measure out the position where the holes are required and indicate with a pencil dot. If the wood is not too clean place a piece of paper on it. Lay the card on top, open, stand the nail on the dot and hit sharply with the hammer. (It is essential to hold the nail steady or it will jar the hole.) The nail will punch out the paper and sink it into the soft wood. Hard wood is no use.

With practice this punching is easily and quickly done.

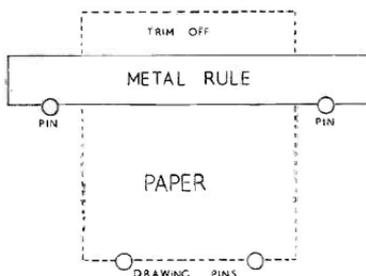
BOLD NUMBERS

To enable my automatic hand numbering machine to give a good impression, I use a home-made ink pad. This is simply a strip of felt cut to the actual size of the ink-pad holder. Roll the strip up into the height required, then sew the edges to keep it firm.

This pad will not jump about when in use, and it will make good impressions.

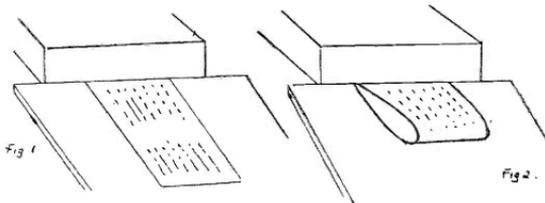
NOTE :—The pad supplied with my machine was not wide enough, with the result that it slipped about when in operation. Therefore it did not ink the whole of the figures.

—David Beattie (Penrith).



Above: Raymond Hibbs' device for cutting paper.

Right: Reader Weeks illustrates his method of paper-folding.



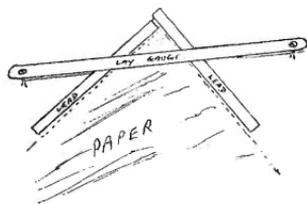
SIMPLE PAPER-CUTTING GAUGE

A good policy for small printers who do not possess a guillotine is to buy all paper and board ready cut to the size required. Even so, occasions may arise when hand-cutting will have to be done and the usual method is to use a metal rule or straight-edge and a knife.

It is seldom possible, and certainly risky from the point of view of spoils, to cut through the whole pile at one cut, while dividing it into several small piles involves measuring the top sheet each time. However, this can be avoided and time thus saved by placing four drawing pins in the wooden board used as a base, in the positions shown in the sketch. The dotted line shows the small pile of paper to be trimmed; the two bottom pins act as a gauge for the paper whilst the two top pins behind the rule ensure that each pile is cut in precisely the same place.

—Raymond N. Hibbs (Gillingham, Dorset).

See
"No Angle
Quads"



QUICK PROOF

If you wish to make a rough proof to try the lay, etc., of a new job, to save inking up the machine unnecessarily remove the rollers and apply a date stamp pad to the type, which will then print sufficiently well to enable the type to be read.

—Robin Penna (Tadworth, Surrey).

NO ANGLE QUADS

I have, for a long time, been trying to find an easy and quick method of printing the telephone number at an angle without troubling to fiddle with angle quads, etc., on short runs of notepaper. Last night I stumbled on a very quick and quite useful method.

Take two short strips of 2 or 3-point lead and lightly fix them under the lay

gauge at the correct angle to take the top and left side of the paper to be printed. This will leave a very slight gap under the lay gauge under which the corner of the paper can be slipped. A pencil line drawn on the padding will ensure that the leads do not slip during printing.

—S. A. Dean (Buckhurst Hill, Essex).

QUICK PAPER-FOLDING

When folding printed papers such as four-page programmes, I use the following method to ensure a quick and neat fold. Using a marble imposing surface which is kept immovable by its own weight, and a thick piece of cardboard to prevent the paper from slipping under the bevelled edge, the paper is placed on the cardboard against the vertical edge of the marble slab. (Fig. 1.) The near edge of the paper is then lifted and folded over until it also touches the slab (Fig. 2), taking care to keep the lower surface pushed up against

the block. Then, holding the two edges down with the fingers of one hand, crease the paper at the fold with the other hand. With a little practice a high speed of accurate folding is easily attained.

—F. W. Weeks (Bath).

MACHINE COUNTER

I would like to pass on an idea which I have found very useful on my H.S.2. The main reason which led me to experiment was a job of 5,000 prints, which was impossible to complete in one evening. Since I have used the counter it has saved me a lot of time in counting out any number, large or small, before starting a run.

The counter is an electrical meter usually obtainable as Government surplus, together with a rectifier, a transformer to reduce the current for the meter down to 50 volts, a resistance which is in circuit so that a load is across the rectifier when the meter is not operating, and a car stop-light switch which is fitted to the base board, with the spring attached to the gripper as shown in sketch.

As will be seen from the sketch, all the equipment is contained in a small box, and in addition to the above I fitted a standard lamp switch and small lamp-holder with a 5-watt lamp (obtainable from Woolworths) on the front at the side of the meter. This provides a warning light and also illuminates the meter.

The box is fitted on the wall, behind the machine, at eye level so that the meter can be read at a glance.

It must be pointed out that the meter cannot be restored to 0000 each time you start a job.

—Leslie C. Mason (Bristol 4).

BINDING MATERIALS FROM WASTE

If you do odd bits of bookbinding you have probably often been stumped for a suitable material for the cover. When faced with this problem I have found it is nearly always profitable to have a hunt through the household rag-bag.

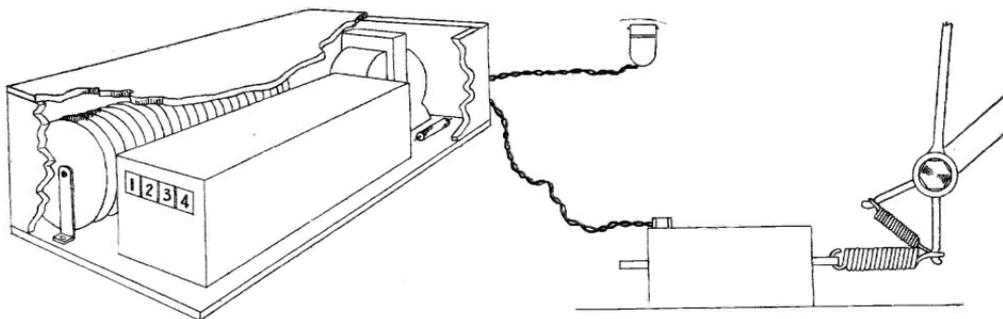
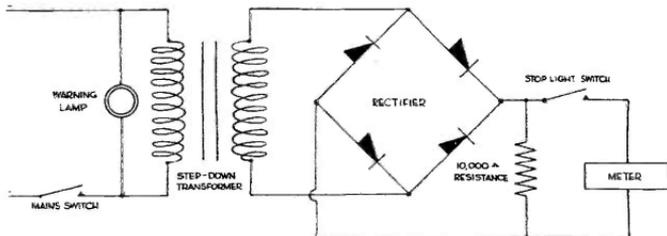
I have found many book covers in this way and the beauty of it is they have cost me nothing. Recently I covered three small books from an old raincoat which had been consigned to the dustbin and last winter I cut up an old macintosh with very satisfactory results. On another occasion I salvaged a sail-cloth blind which was about to be thrown away, and this, when dyed and stiffened, made a really excellent material for a cover. All these materials must, of course, first be cleaned or washed and then stiffened with a coating of thin glue which must be allowed to dry before the material is cut to the size required.

Discarded handbags of leathery material will furnish good covers for small note books, etc. Oddments like American cloth table covers, plastic tray cloths, old typewriter covers, can also be used in your bookbinding operations.

Next time you find yourself up against it for an emergency binding material sort through the household waste.

—J. Griffin (Hednesford).

Details of Leslie C. Mason's Machine Counter.



Call the



THE CLICKER'S 'SHIP

I don't think it's quite sufficient to tell us that the "Clicker" is only a non-deplume for a collection of five "Printcraft" writers. Why not let us know who these writers are and for what sort of correspondence they are responsible?

O.K. If the matter is of such interest here you are. The "Clicker" companionship is: Leslie G. Luker (general typography), David Wesley (ditto), William Holt (sidelines and novelties), A. Holmes (Adana machines and supplies), The Editor (lay-out and editorial subjects).

ENVELOPE MAKING

I have been trying my hand at envelope making and I would like to know what is the best kind of gum to get for the flaps, etc. Is it to be used hot or cold? I find that the gum bought in shops is not very strong and makes the flaps of the envelope curl up when dry. Is there any way of overcoming this—or could you give me some idea of the job?

With regard to the gum, you can either use pure gum arabic, or dextrine. The usual method of dealing with the former is to take a pound of gum arabic, place it in the bottom of a 7-lb. stone jam jar or pickle jar, well cover it with water and leave it to soak for a week, with a loose-fitting cover to keep out dust and mould

spores. Add more water if necessary to complete solution. The thick syrupy gum should then be thinned to the required consistency with boiling water, and a little carbolic acid added as a preservative.

Dextrine is a buff powder that should be made into a gum by stirring in the required amount of cold water. Alternatively, either of these adhesives can be obtained ready made from Messrs. Samuel Jones & Co., Ltd., Adhesives Dept., 252, Southampton Way, Camberwell, London, S.E.5. A thinner coat of a stiffer gum will help the curling of the flaps, but hand-made envelopes are never as flat as machine-made ones.

I do not want to discourage you, but I doubt whether you will make much money from home-made envelopes. You will have to register for Purchase Tax with the local Inspector of Customs and Excise and will be charged tax on all the envelopes you make, whether you sell them, or use them for your own purposes. If you work out the cost of paper, gum, and labour and add your profit, the Purchase Tax will have to be added to this and your products will have to be sold in competition with machine-made envelopes. One envelope machine has an output of over a million envelopes a week!

There are still a small number of hand-made envelopes made by the envelope firms for special purposes. They are usually large catalogue bags and envelopes with strawboard backs. I think your best chance will be to contact a local maker and ask him if you can make up his blanks, which can be supplied ready punched to shape; he can also supply you with adhesives and show you the best way to set about the job. He can also take responsibility for collecting tax, but beware of advertised out-work schemes.

CHRISTMAS CARD WORDING

Which wording is correct on a Christmas Card—"From F. J. and Mrs. King" or "From Mr. and Mrs. F. J. King"?

The latter is correct.

NO CHANGE

I cannot agree with "Printcraft's" habit of putting the author's name in the right-hand bottom corner. I'm all for originality, but this means the name—and names are most important, at least to their owners—is almost lost, especially when a small face is used.

Clicker—

And Leave All Your Printing Problems Here

We have had no complaints from any of our authors. By utilising the bottom margin in this way we save a couple of lines in the text and even this small amount of space is valuable. If the author's name appeared in the heading it would not be larger. The fact that it is printed in bold type capitals and is in an isolated position gives it, in our humble opinion, a greater prominence.

THE MINISCULE METHOD

I understand that "Printcraft" prides itself on being modern. Why, then, doesn't it do what so many modern magazines do—print its titles, etc., in lower-case letters without points (I don't know if there is any name for this system)? This certainly looks more modern and original to me.

This is where we get up on to the platform. Every man to his own taste, but if by modernity you mean Picasso and nu-spelling, then we are definitely decadent and shall probably remain so. We find no virtue in copying other people; only in trying to be as practical as possible. The name of the system you are so enthusiastic about (or is it a system?) is the *miniscule*, meaning the use of small letters. Old-fashioned as we are we still believe in using the English language and its symbols as they were taught to us, and to make our print as clear and as unconfusing as we can.

TRADE UNION QUESTION

I wish to become a printer but I am told that before I can do so I must join a Trade Union or some other organisation. Is this so? And what is the name or names of the organisation?

Don't worry. You need join no society of any description. I doubt, anyway, whether you would be successful in applying for membership in any typographical trade union. For other points raised in your letter see "Printing as a Spare-Time Business" in this feature, No. 21.

EXPEDITED DELIVERY

When a customer orders a job say for Friday and then wants it in a rush by Wednesday (two days before the agreed delivery time) am I entitled to make an extra charge?



As this would probably necessitate the working of overtime you would be justified in charging extra—but please warn your customer first.

In the cause of goodwill we advise you not to make extra charges if these can be avoided.

AUTHOR'S CORRECTIONS

In January my printer quoted me £50 to print a catalogue. I gave him the job. When his bill was presented it asked for £66—£16 more than the original estimate. Must I pay this, considering that the amount asked for was more than the amount agreed? N.B. £16 was marked "Author's Corrections".

The answer to your query comes in the afterthought you label "N.B." This means that when you received the proofs of your job you probably did several pieces of re-make-up involving overrunning, changing blocks, etc. This entailed a great deal of extra work on the printer's part and was not, of course, visualised when the original estimate was submitted. You should ask for a detailed statement from the printer as to how the £16 was arrived at. Better still, go and see him and have it explained by himself. You may find him willing to climb down a bit, but you will almost certainly have to pay *some* fee for author's alterations. (Incidentally, this is an overall term which also means Editor's Alterations.)

The Old Hand

JONATHAN STAFFORD, Old-time
Composer, Talks to the Printer of
the Present



BY the time you read this the Coronation will be over and you will either be thinking of trotting off on your holidays or you are already enjoying same. Or are you? Holidays are supposed to be a rest but to the small printer who owns his own business they can never be as relaxing as to others. For all the time the printer is on holiday he is thinking and planning—rightly—for his next spate of work.

Well, the next big event is Christmas and according to all the signs and portents it's going to be an even busier one than usual. This year, with stationery, cards and a good many other items cheaper by reason of the Budget, we're likely to get many more demands than usual. It is time now to start booking orders, to send lists of Christmas requirements to your suppliers and add to your specimen book. But I'm not going to expand on this topic. Your editor tells me it will receive due attention in the next issue of *Printcraft*.

TOO OLD-FASHIONED?

I am asked why I appear to have deserted my notebook in the last issue and why I did not give any of my old-time recipes. There's a reason, you may be sure. These recipes were necessarily old-fashioned. They served their purpose in my day but there are new notions now and maybe the old ones do not altogether fit in. At the same time I am puzzled by the conclusions of Mr. Leslie Luker that lye, as used for washing up type, is harmful. In my apprentice days we never used anything but lye for cleaning type—and for many other cleansing purposes. I admit that its sliminess was a bit unpleasant but though I must have handled scores of gallons of the stuff, neither my hands nor my clothes ever seriously suffered.

Also I'm wondering about sulphuric acid. This is the stuff with the rotten egg smell, isn't it? Is it *really* not used in any printing process to-day? When I was a young journeyman and our composing department adjoined the process department the odour from this stuff used to turn strong men pale and was often responsible for a mass evacuation of the frames nearest the process door.

GROUND TINTS

A most attractive method of printing letterheads, etc., is by the use of ground

or background tints. These tints are panels of colour of a considerably lighter hue than the type which is, of course, overprinted on the grounds when the ink is dry. They can be made from a number of materials—wood, leather, silk, cloth, cord, rubber, lino, metal plates, etc. The best ground tints of all, however, in my opinion, are furnished by light-weight borders set in masses. The 10-pt. "book" border—No. 1820 in the catalogue—is most effective for the majority of purposes.

A QUESTION OF PROFITS

I am asked how the profits in old-time printing compare with modern ones and whether I think modern printing is too dear. It must be understood that the answer to such a question can only be general and must not be taken to apply to any individual firm.

Though I never had any handling of the profits in my time, I believe that 25 per cent. was considered fair. Out of this was paid such items as rent, rates, deliveries, light, heat, etc., so the *actual* profit was considerably less than 25 per cent. As for modern profits . . . ! I have been aghast at some of the prices I have seen charged and I don't wonder that a lot of printers are grouching about business "going off". They don't seem to realise they're pricing themselves out of it.

SNUFF TOPIC

Have I got enough space to answer a question? It concerns the taking of snuff by compositors. A curious inquirer wants to know why compositors, instead of taking snuff by the pinch as ordinary human beings do, nearly always make a line of it on the back of one hand and then sniff it up by running their noses along the line like a vacuum cleaner.

The answer is this. Remember that a comp works with lead type. Particles of lead are poisonous to the system and if snuff was pinched up and taken in the usual way some amount of lead dust would be bound to be sniffed up with it. So you see, there's sound sense for the habit. Although I'm retired I still take my snuff this way.

MAGAZINE PUBLISHER



These do not concern any of the magazine's production processes. They are purely editorial and are designed to help with the headachy problem which besets so many school magazine editors—the collecting of "copy" with which to fill the magazine. We are all aware that, as a general rule, contributors are shy and require a great deal of coaxing and cajoling. Indeed, I know of many cases where, with Press Day looming hideously near, the harassed Editor has had to sit down and write the whole magazine from cover to cover himself.

Now, surely, this is where masters and mistresses can help in a most effective way. They have powers which are not given to their pupils.

Is the magazine short of illustrations? Then step forward, Arts Master. Isn't it possible for you to set — as lessons, of course — subjects which might conceivably be turned into blocks with which to brighten the magazine?

Now, English Mistress — may I have a small word with you? In the same way as the Arts Master you, too, can help — and perhaps even more substantially.

Now Calling Masters and Mistresses!

ONE of the most pleasing revelations of the correspondence conducted in connection with *Printercraft's* Schools Magazine Competition is the enthusiasm of masters and mistresses. It is gratifying indeed to have such proof of their lively interest, and extremely stimulating to know that so many of them lend a personal helping hand in the production of the school organ.

Perhaps Arts and Crafts teachers are the most enthusiastic and this can be well appreciated when it is considered that the teaching of typography is one of their pet subjects, but generally pedagogic keenness is high all along the line. That being so, I am probably going to make myself as out-of-date as the dodo bird in writing what follows.

But I'll risk it. There is always a chance that one or two masters and mistresses have not thought of the suggestions I would now like to put forward.

You give out the subjects for composition, don't you? Is there any reason why you shouldn't make some of these into subjects that would make interesting reading matter for the magazine? I will not presume to suggest the subjects though I have many in mind. You know the magazine's policy best so to you I leave the choice.

The Crafts Teacher. We thank you for your instruction and your assistance on the production side but you, too, can assist in this copy-compilation problem. A lot of your pupils bring to you articles which they have made themselves and which might perhaps be of interest to others. I am sure you could persuade the makers of these articles to tell others how they were made and, of course, to give instructions for making at the same time. Being asked to do something by a master or a mistress carries so much more weight than being asked by the school magazine editor



who may, after all, only be a girl or a fellow in the wanted contributor's own class.

And if you are very, very keen on the school magazine and would like to do something *out* of the classroom, what about organising a little competition for the

best contribution on so-and-so? The magazine would be pleased to announce it and your pupils, I'm sure, thrilled to enter it.

It need not cost you a great deal. Boys and girls are easily pleased and would not, in fact, expect an expensive prize. A book, a writing compendium, a fishing net or even a box of pencils—any of these simple things would be adequate.

And—but I won't labour these points. I am sure I am only saying what most masters and mistresses have already thought of for themselves. Anything you can possibly do to help the editor of your school organ to collect copy will not only earn his grateful thanks but will create a greater-than-ever keenness in the school generally.

A LAST WORD

You are reminded on page 34 and again on page 52 that the final date of our Schools Magazine Competition draws perilously close. By July 6th the very last entries must be submitted; all received after this date will be returned. I ask all of you who are intending to compete but have not already done so to let our Competition Department have your forms and your two magazines without further delay.

Miss Anne Gilmore and Mr. Vincent Armitage, who are to judge the competition, are braced for the job and, like myself, are looking forward to a really tip-top entry. You will probably hear from both of them in our next issue. Winners will be informed as soon as the competition has been judged, and it is hoped to publish the full and final results in *Printcraft* No. 23, which will be on sale in September.



If your friends do not know of this competition please invite them to enter. You needn't be a regular reader of *Printcraft* nor a customer of Adana to qualify.

The contest is open to all schools, and the rules are few and simple.

Type - Faces for the

SCRIP T types are generally used when it is necessary to simulate handwriting, but certain of them, like Fashion Script and Temple Script, are often employed in a most effective manner for titles, headlines and display work.

There are so many styles and weights of script letter that it would be impossible to describe them all in a short article of this nature. We will, therefore, confine our observations to the five faces which are illustrated in the catalogue.

These are: Dorchester, New Palace, Fashion, Heavy, and Temple. From the point of view of the magazine editor and the small printer there is hardly need to extend the list. Every likely script requirement can be fulfilled from this group.

The chief charm of DORCHESTER is its easy readability. Personally this face is not one of my favourites though it is extremely popular with most small printers. Since we assume tone values for script letter as well as for Roman and Italic, I would describe this as medium in weight, extremely legible and suitable for most jobs of work in which a medium-weight script is necessary. It is likely to combine well with any other matter with which it may be associated.

NEW PALACE, recently added to our Script series, is in a calligraphic category of its own. This, of course, is only my opinion, but personally I regard it as the aristocrat of scripts. Being lightish in colour it will not make a good type for general display purposes but for text—such as the reproduction of a letter—it is ideal. It simulates the beautiful classic style of handwriting more than any other script which I can call to mind and looks impressive in the mass.

Thanks to its special shoulder-high spaces it is a "safe" type on the machine, the height of the spaces giving adequate support to overhanging serifs. It is not illustrated here, but if you will turn to page 3 of cover you will find several pleasing examples in the typefounder's announcement.

FASHION is a bold flowing script, very pleasing when used for titles or display purposes, though, like Heavy Script, it is too dark in colour to be attractively employed for setting in masses.

Very much the same remarks apply to HEAVY SCRIPT though this face is not as pretty to every eye as Fashion Script. Both of them would be ideal, however, for certain display lines in magazine headings or advertisements.



TEMPLE SCRIPT is an original face with a hand-lettered effect which I find most fascinating. Where an unusual script face is required this type must certainly be the choice. Again I would not recommend it for setting in large masses, but for medium-bold display purposes and where two or three lines of script are required I can think of nothing to better it. It is a face which is likely to combine well with any other sort of type matter.

Script, like black letter, is never set except as *Capitals and Lower-case*, but I must warn editor-printers who have not yet used this sort of type that generally it contains many overhanging serifs. These, as you know, are liable to break off if the type is not cautiously handled.

Extreme care, therefore, is recommended when setting, planing and dising and critical attention should be given to the manner in which sorts are stored in the case.

Also, I should add, Script type should never be letter-spaced. If this is done, even with hair spaces between the letters, the face in use loses its character.

The sizes in which the scripts of the catalogue are supplied four of which are shown here are :

- Dorchester : 36, 24, 18 and 14 point.
- New Palace : 24, 18 and 14 point.
- Fashion : 36, 30, 24, 18 and 14 point.
- Heavy : 24, 18 and 14 point.
- Temple : 24, 18, 14 and 12 point.

DORCHESTER

24 point

Very Ornamental Type With a very Condensed Lower

18 point

14 point

Needing careful use on suitable copy but to be avoided where the matter consists

FASHION SCRIPT

24 point

Fashion Script, a Modern 247

18 point

Bold Script letter Very popular and can be

14 point

TEMPLE

24 point

A lighter open Letter with a wide

14 point

of uses, especially as an to a copperplate Script

12 point

HEAVY SCRIPT

24 point

A really Bold roundhand

18 point

Letter which has Extensively for Cartons

14 point

ANDY, THE AMATEUR EDITOR



If it be thought Andy rather heartlessly parted with Tripey, let us hastily explain that the dog was not an established pet of the Andy household, having been wished upon our industrious hero by a tramp to whom he had given sixpence. Apart from this the landlord

A MAGAZINE cover must, of course, be different from the text pages. It must be distinctively decorative in some way or another. The usual method of making it so (and one which is employed by the vast majority of magazines) is to print an illustration in two, three or more colours on some stiffish paper.

This, however, is not always possible for the amateur editor. The cost of the blocks is usually beyond him. He can, however, produce his own blocks. Two methods for the man who is skilful with his hands and possesses a camera are described in this issue of *Printcraft*. Other methods, more simple, have been described in past issues.

While these methods concern themselves with metal plates we must also remember the wood-cut. This very inexpensive form of block has also been dealt with in past issues of *Printcraft*; among the authors who have described it is Joan Hassall, whose exquisite creations in this branch of the graphic arts are among the best I have seen in this modern age.



Then there are lino blocks, rubber and leather blocks. All these methods are

Covers in Colour —

PERCIVAL PAYNE Suggests Four Fascinating Methods of being both Distinctive and

cheap and very fascinating, but they all require skill. What of the magazine editor who has to produce his own cover but feels unequal to the task of tackling any of the processes mentioned above?

He need not despair. Here are four suggestions.

The first was exemplified in *Printcraft's* cover No. 20. This, you may remember, was the Christmas cover and, except for the specially drawn "Merry Christmas" block, was produced in three colours entirely from type and type ornaments. The block, in the opinion of several typographers who have since written to *Printcraft*, might very well have been left out without detracting from the appearance of the job in the slightest degree. Some say, indeed, that the block actually "spoiled" the cover and that the ornamentation should have continued in its place. Maybe they are right. Anyway, it's not the purpose of this article to argue that point.

But I think I may let you into a little secret.

The small blocks and the star border on



forbade resident pets in the house, so that the unwanted lodger had become an acute embarrassment to Andy's mother.

Note : No correspondence can be entered into with regard to any ethical aspect of this story.

Attractive and Cheap

g Methods of Production which have the Virtue
ctive and Inexpensive

this cover were originally set by the editor's small daughter whose age then was not eight. The letterpress, in the first place, was set by the editor himself.

Which just shows you how simple such a type of cover can be if only you have by you the necessary number of blocks.

So first let me recommend this type to amateur editors who have no block-making ability but are looking round for some means of producing a cover of distinction easily and cheaply. Second comes graph-copier or the hectograph method.

This is essentially a process for the magazine with a very limited circulation, but it is one with which, providing you have a sufficient variety of ink, many colours can be produced in a single operation. Your original or "master" is traced or copied in the usual way, then inked in with the various colours and the whole printed off on the graph. A very effective illustration can be produced in this way, but I must warn you that you are only likely to "print" about 25 really good copies before the ink fades. If you require more you will have no alternative

except to prepare your "master" all over again and repeat the printing process as before.

The third suggestion is the silk screen picture. If you have the necessary apparatus this should give you no difficulties. In both this and the graph-copier method the letterpress matter should be run off on your printing machine first and the coloured illustration pasted into the space provided for them.

The fourth method is—wallpaper. Select a paper of small design, cut to size of front and back cover and paste on the letterpress. I have seen some very charming effects achieved in this way.

And, as an alternative to a coloured illustration you might consider a photograph. Enquiries among your friends is almost bound to unearth a number of suitable subjects. The photographs so chosen would, of course, have to be enlarged, and here, unless you have some enthusiastic photographer who is willing to do them for love or for a fee the magazine can afford, is the main snag.

That, not knowing your circumstances, I cannot get over for you. But if the suggestion helps you are very welcome to it.



Step this



M. P. Policy.—"You talk a lot about the policy of magazines in *Printcraft*, but I have yet to trace any sort of policy in your own *Magazine Publisher*. Who is it supposed to appeal to? It looks to me as if it's just designed for the kids."

At the moment, gentle reader, that may appear to be so. We are rather concentrating on juvenile interests because, as our competition testifies, we are keen on encouraging the production of school magazines. Obviously, you have not read the M. P. since its inception otherwise you would have noticed that our policy is a fairly all-embracing one. The M. P. is designed to cater for *all* who are concerned with magazine production whether they are authors, artists, editors, publishers, printers or advertising men. We shall probably return to normal when the excitement of our Schools' Magazine Competition has abated.

Mysterious Catalogue.—"In looking through recent back-numbers of *Printcraft* I have found several mysterious references to 'the catalogue'. What do you mean by this?"

We mean, of course, the catalogue of printing machines, type and sundries published by the proprietors of this magazine. That, I believe is understood by the majority of *Printcraft* readers. We modestly refrain from mentioning Adana every time because we do not want to be accused of ramming the other side of our publisher's business down your throats.

No Compulsion.—"When an editor prints an article of mine am I entitled to a free copy of the magazine in which it is published?"

No. The editor, having paid you for your work, is under no obligation to supply you with copies of it. I have little doubt, however, that he would most willingly send you one if you wrote and asked.

Number One's Wanted!—"I wish you accepted advertisements because I am very anxious to get hold of a copy of No. 1 of *Printcraft* and can only think of *Printcraft* itself as the most likely paper to advertise in. Why don't you use a page or two for advertising purposes?"

We have stated before that our aim is to devote the greatest possible amount of space to matters of interest to *all* our readers; thus, advertising is not one of our departments. At the same time we are always anxious to help and you are not the only reader who is anxious to obtain a No. 1 of *Printcraft*. We should be very pleased if readers who have No. 1's to spare would let us know so that we can put them in touch with less fortunate printcraftsmen who are willing to pay considerably more for such copies than the original published price of 1/6d.

Circulation and Readership.—"What is the difference between circulation and readership? How can a magazine have a circulation of 20,000 (as I have seen stated) and yet enjoy a readership of 60,000?"

Circulation is the actual number of copies *sold*. Readership is the number of people by whom the magazine is *read*, and the figure is based upon the assumption that one bought copy is read by more persons than the buyer.

Type-styles.—"I have a good quantity of 8-pt. Plantin and a fair amount of 18-pt. and 30-pt. Imprint Shadow. Do you think these types would make a good combination for a magazine—Plantin for text and Imprint Shadow for titles and sub-titles?"

Quite good. But you should supplement your text with a fount of 8-pt. Plantin Italic and 8-pt. Plantin Bold. You will almost certainly require these for use as crossheads and emphasis in the text.

Way—

for comment, criticism, suggestions and advice from our Editor-Printer who is anxious to help all readers of this Magazine Section. Write to him if you have any doubts or difficulties or if you have news or views which you feel will interest your fellow craftsmen.



Distributing a No. 1.—"I am thinking of launching a 24-page advertising magazine (8vo. monthly, price 4d.) in this town. I propose to publish a first number of 2,000 copies which I shall print myself on my T.P.48. What chances of success do you think it has and what is the best way to circulate it?"

We hesitate to commit ourselves on the first question because we have not seen the magazine, nor are we very familiar with your town (Hull). We assume, however, that in a publication of this type the adverts will pay costs and if this is the case you haven't very much to worry about. Anyway, congratulations on your enterprise. As regards your second question, we advise you to consult your local wholesale distributor. He will probably require you to advertise your magazine in the local press and may require you to supply leaflets. If you arrive at agreement with him he will make it his business to see that your magazine gets on the bookstalls when it is published. I must warn you, however that he will probably expect a fairly stiff commission on every copy sold.

Production Methods.—"How many copies of a page or sheet of a magazine could you reasonably hope to produce by (a) the graph-copier method, (b) silk screen, (c) type on a handpress?"

By (a) 40 to 50 (if you are an expert), (b) about 2,000, (c) 250,000 (or more).

Press Photographs.—"Why are photographs received from press agencies generally of the glossy variety and not sepia or matt?"

If you ask for sepia or matt you will get it. If you leave it to the agency you will usually get glossy. Why? Because glossy photographs cannot be as easily soiled or scratched as matt photos and this is a big factor when you consider the number of hands a press photograph

must pass through before it is finally reproduced as a block. Apart from this the tones in a glossy photograph are always better.

Text and Display.—"What is the difference between text and display types?"

Hasn't this been made clear in recent issues? Text types are used in the body of the work and their sizes range from 6- to 14-pt. Display types, which may be capitals and lower-case, range in sizes from 18- to 72-pt. Sizes over this are usually classified as poster types.

Quite Permissible.—"If it is in order I am intending to change the types I use in my magazine (Old Style in text and Rockwell for display) to Times Roman and Times Bold as you do in *Printcraft*. Can I do this without infringing any copying law? For instance, would you object?"

Bless your heart, no. You will infringe no law by doing as you suggest. If your magazine could speak, I am sure it would tell you it would welcome the change just as I am sure (even though they may not be typographically conscious) that your readers will be pleased. Go ahead and "copy" by all means. Incidentally, *Printcraft* claims no credit for its type-dressing. A lot of the best magazines also use this style.



THE SMALL PRINTER'S HANDBOOK

Readers who have missed the advertisements concerning the *Small Printer's Handbook* will be pleased to learn that an entirely new edition is now in the press and will be published very shortly.

Unhesitatingly we claim this to be the best-ever issue of this popular little manual. To small printers generally it is a mine of typographical information and to beginners an absolute godsend. It is, in fact, a book which *no* printer should be without.

The Small Printer's Handbook will be fully reviewed in the next issue of *Printcraft*. Meantime here are a few hints regarding its contents :

Registration under the Business Names Act ; The Publication of Books ; The Printer's Position with regard to Betting, Lotteries, Pools, etc. ; The Buying of a Beginner's Printing Plant ; The Business Side of Printing : " The Standard Conditions of the Printing Industry," issued by the British Federation of Master Printers and brought up-to-date ; All about Process Blocks, both Half-tone and Line ; Type Measurements ; Casting-off Copy ; Divisions of Printing Papers ; Equivalent Weights of Writing Papers ; What You should Know about Envelopes ; Scoring ; Folding ; Printing Inks ; Mixture of Colours, etc.

You are advised to order your copies as early as possible as a big demand is anticipated for this invaluable work.



FREE!

Adana Hand-
presses, Type,
Tools & Other
Accessories
for your



SCHOOL MAGAZINE

There is still a chance for you to enter "Printcraft's" **FREE Schools Magazine Competition**, in which four of the famous Adana High-Speed Printing Machines and a host of accessories are offered to successful competitors. Forms and full particulars were published in "Printcraft", Nos. 20 and 21, but if you haven't these issues by you please write at once to the address below.

Closing date is July 6th next, after which no entries can be accepted. Take this last chance now and do your best for your school!



It costs nothing to enter! Forms can be obtained by applying to :
"Printcraft" Schools
Magazine Competition,
The Adana Organisation,
Church Street, Twickenham.



It can be done—and at home! If you have a camera, a few easily acquired accessories will enable you to turn out your own blocks. But please follow the instructions given here very carefully

Making Line and Half-Tones with a Camera

ARTICLES on the manufacture of line blocks at home have appeared in past issues of *Printcraft*. Ingenious methods of preparing plates and etching them, without the aid of complex apparatus, have been described. The only snag is that these methods have called for considerable artistic ability on the part of the operator.

Line blocks are always professionally made by means of a camera. While this means that an artist must prepare the original drawing, the blockmaker needs very little artistic ability providing he can use a camera and do his own developing and printing.

Assuming you have the drawing which you wish to turn into a block, here is the method of procedure:

Fasten the drawing upside down in an exact vertical position on a copying board—a pastry board will do if it can be arranged to stand securely. The board should be evenly and powerfully illuminated by an equal number of electric lamps of equal power on either side. The lights should be so shaded that no light from them directly enters the camera lens.

Any camera of suitable size may be used. If it is a roll-film one, a special slow "process" film should be fitted. If the camera is made to take plates and film packs, a "process" film pack is indicated. In either case, the film will have to be reversed when printing down on the metal, otherwise the image will be reversed from right to left. This results in a slight loss of definition, owing to the thickness of the film being between the image and the printing plate. If a plate camera is available the situation is easier. Reverse the ground glass of the focusing screen and also reverse the special slow process plates in their dark-slides.

The original and lights are ready and the camera loaded. All that remains is to focus very carefully, either with a ground glass screen or by setting the scale of the film camera and carefully measuring the distance from the image to the centre of the lens. The lens should be stopped down to about $f\ 22$ to give the sharpest definition and the exposure made. The time of exposure will have to be found by trial and error, as the possible variants—number, power and distance away of lamps—all have a bearing.

In ordinary photography the rule is to expose for the deepest shadow and leave the highlights to take care of themselves. In process work the rule is reversed. Expose for the highlights, and develop for the shadows. Start with an exposure of, say, 15 secs. with one 100-watt lamp each side and from the result of this increase or decrease exposure. The aim is to get a dense black negative with the image in clear glass.

Develop according to the instructions of the plate or film maker, using metol-quinol or meritol-caustic for preference. The image will flash up very quickly, but do not be misled. Develop for the full time and if necessary a little longer. If there is any trace of fogging of the image reduce with Howard Farmer's reducer. This is simply a bath of *plain* hypo, to which has been added a little potassium ferricyanide solution. This is done, of course, after thoroughly fixing and washing the plate. If the printer is an expert photographer and the reduced plate or film is a little "thin" it can be intensified, but in any other case it is better to scrap the plate, double the exposure and start again. After careful washing and drying, all pinholes should be spotted out with indian ink.

The next step is to obtain a suitable piece of zinc plate from a recognised

LINE BLOCKS

supplier, such as Hunter-Penrose, Ltd. This will be even in thickness and slightly etched on the face.

Next comes the sensitizing solution, which is a mixture of ammonium dichromate dissolved in distilled water, and fish glue. The actual proportions used are the secret of the metal plate printers and vary according to circumstances. Make a saturated solution of ammonium dichromate by placing one ounce in a clean bottle and add one ounce of distilled water. After shaking at intervals for some time, the solution will be saturated and should be carefully filtered off into another bottle, more water being added to the solid in the first bottle to be brought into solution for when required. Obtain some fish glue and stir in about ten per cent. of the dichromate solution.

The plate should be thoroughly cleaned and degreased in methylated spirit and dried, away from dust. A small pool of the dichromated fish glue is poured into the centre of the plate. The plate is then gently tilted so that the fish glue runs to one corner. Just before it runs off the edge the plate is again tilted, so that the fish glue flows over the plate to the next corner and so on, until the plate is covered. The plate is then stood on one corner until all the surplus has run off.

The plate is not sensitive to light yet, but becomes so immediately the coating is dry. Light renders sensitized fish glue insoluble in water and on this depends the success of the process. The plate should therefore be placed to dry in a dark, warm place.

Immediately it is thoroughly dry, the negative should be placed in a photographic printing frame, reverse way round in the case of a film, ordinary way round for a plate that was reversed in the camera. The sensitive face of the metal plate is placed in contact, and the back of the frame clamped firmly into place.

The exposure is then made and once again the length depends entirely on the power of the light available. Even lighting is essential and it is a good plan to move the frame with a circular motion within a foot or so of the most powerful light available. An exposure of one minute to powerful arc-lamps may be sufficient, but a quarter of an hour, or twenty minutes, may be needed with home lighting. If the exposure is insufficient, the fish glue will not be rendered insoluble and it will only be necessary to wash off and start again, with double the exposure.

The next operation should be carried out in a fairly dim light (a 25-watt ceiling light will probably be safe). The plate is then placed in water and within a few minutes the soluble parts of the coating, protected by the dense black parts of the

negative, may be gently washed away with plenty of water and a piece of cotton wool. The plate is thus developed, but the image is invisible and may be damaged, or even washed away. To examine the film, the plate is laid in a solution of methyl violet, which may be made by dissolving the "lead" of a piece of copying pencil in water and filtering the solution. The image, if it is there, will show up in violet. After rinsing, the plate is dried.

To prepare for etching, the plate is dusted with finely-powdered bitumen and the plate tapped sharply on one edge to dislodge loose bitumen. The plate is then baked to melt the bitumen. The image appears to disappear, then becomes brown and finally a chocolate colour. At this stage the plate is cooled, the back and edges are completely coated with an acid-resisting varnish of shellac dissolved in industrial alcohol. When this is dry the plate is ready for etching.

Zinc plates are etched with nitric acid, not hydrochloric, as I have seen stated in several articles. The fumes of nitric acid and the oxides of nitrogen given off in the course of etching are rather unpleasant and would be dangerous in any high concentration. On the other hand, the plates do not etch so well if kept covered all the time, as the concentration of fumes tends to retard etching. This operation should therefore be carried out in a well-ventilated room. If you must use the kitchen, open the back door.

The finer the work, the weaker should be the starting acid. The plate should be laid face up in a porcelain photographic developing dish, just a little larger than the plate. In a glass measure make up a 2½ per cent. solution of pure nitric acid in distilled water and pour into the dish just enough to cover the plate. Rock the plate to and fro so that the acid flows evenly over the surface. After a few minutes, pour the acid back into the measure and rinse the plate gently under the tap. When the plate is etched to a depth of three or four thousandths of an inch, rinse and dry it.

It will be obvious that once the acid has bitten below the surface of the plate, it can also bite sideways and undermine the protected areas. This is called underbiting, and its prevention calls for careful treatment.

Finely powdered "Dragon's blood"—a natural resin—is used for this purpose. It is dusted on to the plate and gently brushed all four ways so that it adheres to the unetched surface and to the sides of the etched surface. The plate is then gently heated to 120° F. when the "Dragon's blood" melts, forming an acid-resistant coating. When the plate is cool, it may be replaced in the etching dish and 5 per cent.

acid flowed over it. After a few more minutes the plate should be again rinsed and examined. If the etching still requires to be deepened, as it probably will, the "Dragon's blood" treatment is again repeated and the plate is etched once more in 10 per cent. acid. Once the top skin has been broken through and the face image is satisfactory, it is possible to etch faster, by using stronger acid, up to 25 per cent., as with each application of resist the protective layer becomes thicker.

When the etching reaches the desired depth, the plate is thoroughly washed with water to remove all acid and zinc nitrate. The resist is washed off with methylated spirit or industrial alcohol, and the plate

is ready for finishing. Unwanted areas of metal are chipped away, the plate is drilled and mounted to type-height, and thus is ready for use.

The more dilute acids used for etching are not particularly dangerous to handle or use, but they must be kept off hands and clothing. They will oxidise and kill skin and rot fabrics; they also produce yellow stains on anything with which they come in contact. The strong acid must be kept in a glass-stoppered bottle, as it will not only rot cork, but will oxidise it so rapidly that a fire might be started. Needless to say, it must be kept under lock and key and away from children.



HALF-TONE BLOCKS

THE real "glutton for punishment" who wishes to go further than making line blocks may care to try a few more experiments. The greatest snag for the beginner is the lack of half-tone screens. However, experimental screens may be made at home with care and patience.

A half-tone screen consists of two plates of glass ruled with lines of the same thickness as the spaces between, bound together, face to face, at right-angles. To make them at home requires several full lengths of new 1½-pt. medium brass rule and a box of the special plates used for making photographic graticules.

A solid square of brass rule must be made up. This might be from 48 pieces 6 ems long, 72 pieces 9 ems long or 96 pieces 12 ems long. Any of these will make exact squares of rules which, when printed on a piece of art paper, will give alternate lines and white spaces, equal in width, and 48 to the inch. The pulls should be absolutely perfect in colour and make-ready, in the best process black on the finest white art paper.

The camera is set up as for making line blocks and the art pull fastened on the easel. When the correct exposure is found,

a perfect negative is made on a fine process plate. If it has been focused up to precisely the same size as the printed image, this is the negative of a 48 screen; if it has been reduced in size it will be a correspondingly finer screen, but in any case *the image must be larger than the back lens of the camera*, hence the two-inch square original, if it can be managed. Several plates can be exposed at different degrees of size, if desired, and several sets of screens made.

From the negative, two or more of the special graticule plates are exposed as if making contact lantern slides. The exposure and development of each plate in the set must be identical as they must be of exactly equal density. The graticule plates are very thin and need very careful handling because the emulsion is almost invisible; they are also very fast for contact printing. When a really successful pair of plates have been made, fixed, thoroughly washed and hardened, they should be very carefully and thoroughly dried. When absolutely dry, they should be placed face to face at right-angles and carefully bound together with lantern slide binding. Our half-tone screen is now ready for use. It is placed in the camera behind

the lens at an angle of about 45 degrees. The angle is not very important at the moment, as endless experiments can be tried and many different effects obtained by varying the angle and also the distance between lens and screen.

The camera is now set up as before and a good, contrasty, glossy photograph is put on the easel. It is photographed, as in the case of a line block, but the exposure is increased because the light has to penetrate the screen. Try four times the line exposure and double it each time until a satisfactory exposure is found. A faster plate may be tried if the exposures are found to be too long. Exact exposure is far more important in half-tone than in line work, and some practice may be needed before a good result is obtained.

The negative is printed down on to a sensitized metal plate, as in the case of the line block, but this time copper may be used. The dichromated fish glue should be diluted a little with distilled water, as a thinner and perfectly even coating is essential. A rubber sucker of the kind used for hanging notices in shop windows can be fixed by its hook into a hand-drill. The sucker is then wetted and secured to the centre of the back of the plate.

The face of the plate is carefully cleaned and held face upwards, a pool of sensitizer is poured into the middle. On rotating the wheel of the drill, slowly at first, the sensitizer will spread evenly over the face of the plate. Use care, however, as any excess will be shot off in all directions.

After exposure the plate is carefully rolled up with lithographic transfer ink, and when it is thinly and evenly coated, it is placed in water. In a few minutes the water will have penetrated under the ink in the soluble parts and may be very gently swabbed away with best cotton wool. The plate is then dried and dusted with "Dragon's blood". The plate is heated, as in the case of line work, the back and edges coated with resistant varnish and the plate is ready for etching.

If zinc is used, proceed as in the case of a line block, but if copper is used, the etching fluid will be a solution of ferric chloride. Ferric chloride is sold in two forms: it may be bought as a buff-coloured, rock-like solid which readily absorbs moisture from the air dissolving to a dark brown liquid; more commonly it may be bought from any good dispensing chemist in the form of the dark brown liquid. This liquid may contain some free hydrochloric acid as an impurity, and this might be capable of destroying the resistant coating on the plate. To prevent this, ammonia is added, a little at a time, with shaking and allowing to settle until there is a small permanent deposit of ferric hydroxide (common rust) at the bottom

of the bottle. After standing for several days the solution is filtered and is then ready for use.

Ferric chloride solution has the curious property of etching faster in dilute solution than when concentrated. This is because the face of the plate becomes coated with a layer of copper chloride which is unable to dissolve in the concentrated ferric chloride solution. The addition of water to the solution provides the necessary solvent for the copper chloride and frees the surface for further etching.

The reason for using ferric chloride as a mordant, or etching agent, is that it works without producing bubbles of gas which might interfere with even etching. Etching is commenced slowly with concentrated solution, and it is gradually diluted to speed up the process.

In the case of a half-tone, the etching is only carried out to a depth of two or three thousandths of an inch. Care must be taken not to etch too deeply. It is better to stop a little on the early side. The plate can then be proofed and if the high-light dots are too large they can be reduced by fine etching. The plate is rolled up with a stiff ink, such as lithographic transfer ink. Local etching is carried out by painting the high-light areas with fairly dilute etching solution with a water colour brush of suitable size, mounted in a quill, as the etch will rapidly eat away the ferrule of a metal-mounted brush. The etch is allowed to work for a few minutes and is then washed off under a water tap. Alternately, small dense shadow areas can be protected with greasy lithographic crayon, or a resist of shellac in alcohol, or bitumen in benzene, the plate then being replaced in the etching bath for a few minutes. This local control is really a process of controlled underbiting, in which the size of the dots is reduced by etching their sides away.

When the etching is satisfactory, the plate should be thoroughly washed, dried and the acid resist removed with alcohol or benzene. The plate is then bevelled with a file, so that it can be nailed on to a mount. When mounted to type-height on a suitable base, the block is ready for printing.

If the dots appear to have a slight burr and to feel rough to the tips of the fingers, the face of the plate may be brushed gently, but firmly, in all directions with a soft brush. If this does not give a smooth printing surface, and the resulting print appears patchy, even after make-ready, it is practically certain that underbiting has been allowed to go too far and the tops of some of the dots have broken off. In this case the only remedy is to start again from the beginning.

OVERPRINTING

It can be a Profitable Field for the Small Printer, says—

JAMES PETERS

HOW often has the small printer picked up a catalogue or leaflet from the counter of a local shop to study the type layout and copy, which seeks to persuade the reader that "Blakes Super Cycles" are best, or that he must buy a "Double X" radio to-day? His critical eye notices the high-class finish and the three-colour work, then he dismisses the handout as an interesting piece of typography, but nothing with which he can compete. He may be right, but that piece of advertising material nevertheless offers him the chance of an excellent order.

The main commercial aspect of the leaflet in his hand is that it advertises "Blakes" bicycles or "Double X" radios; it gives no advertisement to the man from whose counter it was taken.

Some advertising matter leaves a space for the retailer's rubber stamp, but even so, this does not firmly associate the shopkeeper with the goods advertised.

Whenever the opportunity presents itself put this point to a retailer and the chances are he will give you an order to overprint his name on the catalogue. If he is a little doubtful, point out that since most goods which are advertised by printed catalogues give a good return, the salesman, who has many more goods to sell, gets an even better return.

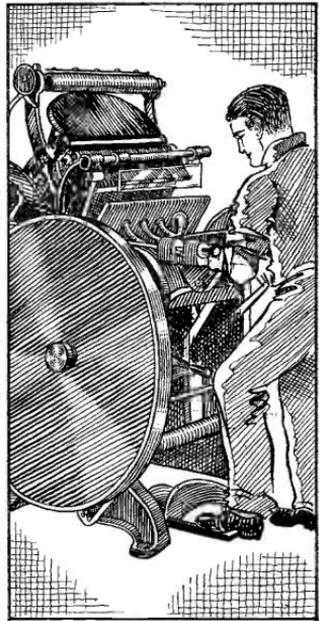
This type of work offers a great advantage: the paper is already supplied.

Having obtained an order, arrange with your customer that you will collect all the material offered at regular intervals (once a month should suit most businesses) and return the work within twenty-four hours.

You will probably find the leaflets are already well covered in print, and it is not necessary for you to use large type. 12-18 pt. should be big enough for the name, while for the address you could use a bold 8-12 pt.

Of course, when the type is set it can be used on every style of manufacturer's leaflet from the same customer. But do not forget to allow for the adjustments you will have to make on your machine when you start to overprint a different pamphlet.

The overprinting of amendments is another branch in this department of printing business. In these days of con-



tantly changing prices you may be called upon to print new labels which can be stuck over the original cost, whilst there are the retailer's own amendments; for example, an attractively printed sticky fly label can announce that James Samson Ltd. can supply "Blakes" cycles on their well-known easy payments system.

Although not so easy to approach, manufacturers themselves are good customers for this style of work. They realise that shopkeepers will give their goods far more prominence if they are easily identified with their particular store.

Undertaking orders for overprinting is a profitable line which is commended to the printer with the smallest press, but its possibilities are enormous; it enables him to build up a reputation as a speedy, obliging worker. Getting in on the ground floor will soon give him the opportunity to seek more ambitious orders from customers.

With the abolition of purchase tax on pianos, etc., and the various price-changes in consequence of the reduction in the tax on many other commodities, many lists and catalogues are obsolete and the go-ahead man will be contacting all retailers in the trades affected. He will be welcomed if he shows how these catalogues can be revised by overprinting, or inserts prepared to show how the changes affect the prices.

Making Type



NOT unreasonably the customer who comes to Mr. Printer with an order wants some idea of what his job will look like when it is finished. Though he may not possess an acute typographical consciousness he is, naturally, interested in the types that will be used. Mr. Printer, of course, has a specimen book of jobs he has done in the past and these are presented for the customer's inspection so that he can choose a style for himself.

All very correct ; all very businesslike. The customer chooses. But he leaves Mr. Printer with a vague little nag in his mind because he knows that his job is going to be a copy, or a near copy, of someone else's. Being human he (very rightly) desires to be a bit different.

Now this poses a problem. It is, however, one that can be solved with most pleasing advantage to the customer and with pride and profit to the printer.

PLEASURE FOR BOTH

The customer might balk a little at the idea of copying another man's work but the odds are that he wouldn't in the least mind *you* designing his job for him because he has an idea (and a right one) that as you are a printer, designing is part of your trade.

But even the most nimble-brained of us are unequal to the task of pulling a suitable lay-out out of the bag at a moment's notice. The best one can do is to make a few rough suggestions in pencil. These may or may not impress the customer but,

assuming him to be print-ignorant, they inspire no real typographic picture in his mind. What he wants to see is his job—*in type*.

That, we agree, is impossible. Then, as the job cannot be immediately planned and presented and we fear our customer will depart not *completely* satisfied what are we to do ?

The answer lies in taking a middle course. And this is a course which, if you possess any sense of creation whatever, will be an absolute joy. Moreover it will do more to enhance your reputation as a typographer than half a dozen specimen books, some of which may contain samples which, with the experience you have gained since pasting them in, do not now reflect your best work.

So what I am urging you to do is to let your type book also be your specimen book. This way you kill two birds with one stone. You impress the customer with the quality of the work you can put at his disposal ; at the same time you destroy within him his vague "copy-cat" complex. And to make one of these books you do not require an extensive range of type-faces.

THE PLAN FOR THE JOB

Let me develop the suggestion.

Now each page of this type-specimen book is not, as usual, to be given over to reproductions of the alphabet in various type-faces. Each face, instead, must be given over to a complete *job*, carefully planned beforehand and executed by the printer. To prevent Mr. Customer imagining that he is infringing anybody's copyright this job must be neutral in nature—that is, it must contain a non-existent name and address so that it cannot be identified with any living person.

A Customer, T. Noname, G. Never-known, James Nonsuch—these are the harmless sort of names to select and there are dozens of others you will find fun in making up.

As with the name, so with the address. That, too, must be fictitious. 16, High Street, Notown ; 90, Main Road, Littleville ; 4, West Avenue, Anyplace—anything unidentifiable will serve as an address. Incidentally this practice is to be warmly recommended where sorts of some particular type faces are short. The names can be made to fit the sorts available, you see.

Now let's imagine that the first page of our type-specimen book is a letter-head set in the famous Times New Roman

A Printing House in the Days of Good

YOU will remember that in *Printercraft* No. 21 we took a trip on an imaginary magic carpet back through time to the glorious days of Good Queen Bess. We learnt how the printing trade, which up until then had been dominated by foreign craftsmen, was now turned over to English printers through the various decrees that came into force and how there was much discontent because of a multitude of restrictions in the path of the ambitious young printer.

Let us settle ourselves on that same magic carpet for another journey across the centuries, and glance again at the Queen's printers at work in their stone-flagged, half-timbered offices. Ready? Then off we go . . . and here we are!

First, of course, we are curious to see what kind of equipment our friends are using. You will notice that their entire plant is installed in one room—no separate composing rooms, machine rooms and foundries, as in the modern Elizabethan printing works.

Two men are setting up type in galleys by hand, just as Gutenberg did a hundred years before and as their descendants are to do for centuries to come. A forme is

being locked up on a wooden bench (how familiar these operations are to us!) and an apprentice is carrying a completed forme across the room to the rough hand-press. There the master printer himself is supervising the operations of his employees.

The press is a simple affair, not much different from that pioneer press erected amid such secrecy by Gutenberg and his partners in Mainz at the birth of the art. There are two heavy upright timbers, solidly supported and braced from the walls and ceiling, with an equally massive bench or table to hold the forme. Between the timbers is a thick beam containing a simple screw, about eight inches in diameter, with a very large thread, and turned by means of a long bar. The screw forces down a flat wooden plate or platen, impressing the single sheet of paper with great force on to the inked type.

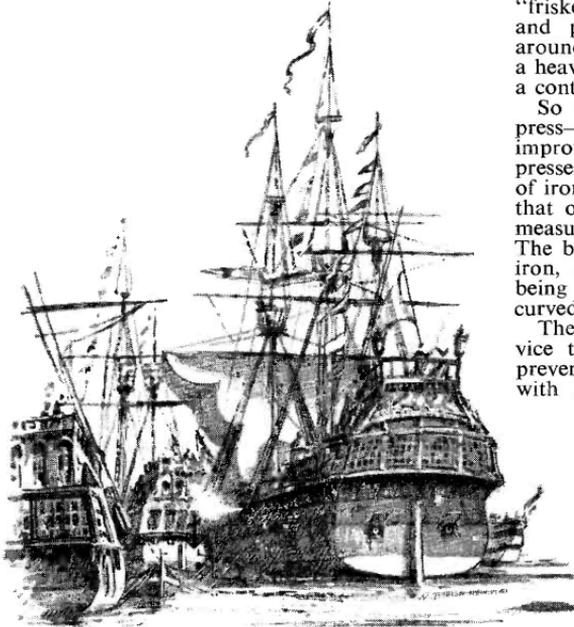
Now we see the reason for the heavy bracing; that crude but effective screw is used to exert a really powerful thrust upon the platen, so as to ensure a good, even impression. The "kiss" impression on coated paper, beloved of modern printers, is unknown to the Elizabethans.

The press has a hinged frame and "frisket" to hold the paper in position and prevent offset from the furniture around the type. The type is inked from a heavy round pad, and the ink is kept in a container at the side of the press.

So much like the original Gutenberg press—yet there have undoubtedly been improvements over the years. In many presses of the time the screw is now made of iron. The platen is usually larger than that of Gutenberg, which seems to have measured about 19½ inches by 14 inches. The bar or handle is now often made of iron, and given more power either by being weighted at the end or by being curved.

The more advanced presses have a device to keep the platen steady and so prevent slurring at the moment of contact with the forme, while there is usually a carriage to hold the forme, with a simple mechanism for running it under the platen and back again for inking. (Previously the forme had just been shoved under the platen by hand!) An interesting feature, too, is that the press is fitted with points in order to secure correct register, for two-colour work is not uncommon.

This, then, is the press in use in the latter part of the 16th century. It is to remain in its present form



Queen Bess

Concluding "Printing in Those Other Elizabethan Days" which appeared in "Printcraft" No. 21

until at least 1620, when an improved version is introduced to this country by a Dutchman. And that type of press will remain, with few modifications, until the beginning of the 19th century, when Lord Stanhope invents his iron press. Not until König introduces a rotary press for *The Times*, years later, does the old design lose its supremacy.

What about the type our friends are setting? The job they have in hand is a legal text-book, and the type is a form of "Textura"—the old formal gothic black letter, very much like the types we reserve nowadays for "olde-tyme" Christmas cards.

Textura was in general use in the first half of the century, and continued in favour until long after 1600 for such works as Bibles, and liturgical and legal books. The famous Authorised (King James) Version of the Bible of 1611 was set in Textura.

But in 1509 the first Roman or white letter type had reached England. Now, in Elizabeth's reign, with an ever-widening field of official documents, pamphlets, books of poetry, drama, travel, philosophy, science (much of this highly imaginative!) and other subjects, the roman letter is in far greater demand, and Garmond romans and Granjon italics are to be found in most printing offices.

None of these types, however, have been designed in England. The Elizabethans have learnt the art of type-founding—that is, of making pieces of type from matrices—and are practising it on a small scale, but the punches from which the matrices are made, and which are cut by the actual designer or his workmen, all come from the Continent. Holland and France are the principal sources of supply, and not for many years are English type-designers to come to the fore.

We have to admit that the books being turned out are by no means impressive, looked at through modern eyes. The output of books is rising rapidly, but standards of taste in their production remain low compared with the best Continental printing.

Most of the books are decorated by woodcut title borders and initials, a characteristic of work of the period. The titles are set out quite simply, crammed between ornate and often unsuitable borders.



A good deal of experimenting with engraving on metal for illustrations has gone on throughout the century, and now a few fine books with engraved copper-plate portraits, maps and other illustrations are being produced. But illustration generally has declined since the great days of the woodcut, when master artists like Dürer and Holbein turned their genius to the embellishment of books.

What sort of output do these printers, with their primitive plant, achieve? Our friends in the print shop are too busy to tell us, and unfortunately we have no records from other Elizabethan printers that will help. So we must turn for enlightenment to the Frankfort printers' ordinance of 1573.

The ordinance mentions 3,600 impressions as being the average for a 15-hour working day, including rest periods. This is an output of 240 sheets an hour. Such figures indicate that the printers of the time had attained remarkable skill, considering their crude equipment, and even up to the end of the 18th century pressmen were not expected to do much better.

Printing had indeed made advances during its first hundred years, and if the Elizabethan printers did little to improve the typographic art, theirs is the honour of having given to the world some of the finest flowers of our literature. Sidney, Spenser, Bacon, Marlowe, Shakespeare—these are only some of the mighty names that gained renown by way of the printing offices in the golden age of Elizabeth the First.

This is another approach to print expressly designed for new magazine printers and beginners generally. It is a natural follow-on to our recent series, "Approach to Print in Pictures" and is

intended to deal with every aspect of the letterpress printing process, assuming that the reader knows nothing or very little, but is anxious to learn. For this reason all technical and even



(1)

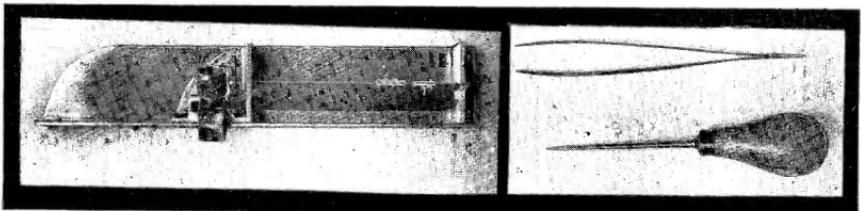
TYPE AND ITS SPACES

(2)

1. This is **TYPE** which bears on its surface the letter to be printed. Type is of uniform height, .0918 of an inch or the height of a shilling stood on its edge. It is made of an alloy of lead, antimony and tin, to which sometimes a little copper is added to improve its wearing qualities. The part of the type which bears the letter is known as the **face**; the base on which it stands is known as the **feet**.

Although type is of a uniform height it is not of a uniform width except in series such as Typewriter, which is one of the names for types of special design. The "i's", for instance, are thin and the "m's" and "w's" fat. Type is made in a number of sizes and is measured in **points**, of which there are 72 to the inch. The standard unit is a **pica em** which is a square containing 12 points.

2. These are **SPACES**, which are made from the same metal as type though they are considerably shorter in height. They are used for placing between words so as to separate one word from another when setting type. There are five kinds of them; the **em space** or **quadrat**, which is a square of the type being used; the **en space** or **quadrat**, which is half the size of an em; the **thick space**, which is one-third the size of an em; the **middle space**, one-quarter the size of an em; the **thin space**, one-fifth the size of an em. There are also hair spaces, varying from 8 to 12 to the em, but these are not usually supplied with a fount of type. The **quadrats** are the larger spaces, ranging from $\frac{1}{2}$, 1, 2, 3 and 4 ems. We shall deal with these under the heading of Spacing Material.



(3)

TYPE-SETTING TOOLS

(4)

3. This is a **COMPOSING STICK**, which is a shallow tray of metal with a movable screw or lever so that it can be adjusted to a given measure. There are many kinds of composing sticks but that shown here is the most popular with beginner-printers. You will observe that this stick contains a piece of metal with a projecting "nose" at one end. This is a **SETTING RULE**. It is of the same height as type and is made of brass. When setting type in the stick it forms a support against which the type can rest. The nose is added so that the rule can be easily lifted from between lines of type-matter in the stick; also for lifting type out of the stick and for tying it up afterwards. (You will hear about this anon.).

4. In this picture you see (above) a pair of **TWEEZERS** and (below) a **BODKIN**. The tweezers are made of steel and are used for picking up letters when they fall in places inaccessible to the fingers. Tweezers must always be used with great care, and never for picking type out of the stick or a forme as they are very likely to slip over the face of the letter and damage it. Do not use tweezers at all if your fingers can do the job.

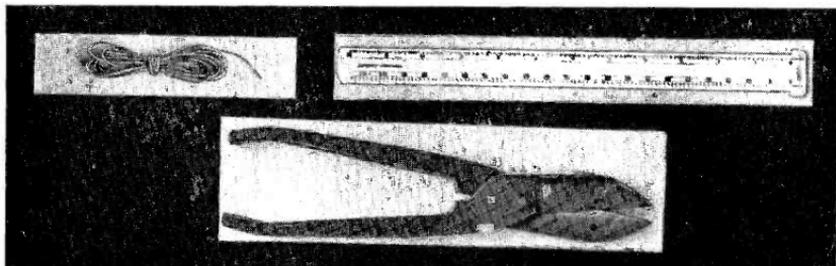
The **bodkin** consists of a steel point which is fixed in a wooden handle. It is used largely for lifting lines of type in the galley or forme and often in the place of the setting rule when tying up type. (The word **forme** will be explained later.)

IN OUR NEXT ISSUE : WHAT THE BEGINNER SHOULD KNOW ABOUT TYPE

semi-technical expressions or allusions have been reduced to the absolute minimum.

The first few sets of pictures will describe the most important art of composing type. To under-

stand that thoroughly the novice must first become acquainted with the tools and the equipment he will find himself handling. These are pictured and described below.



(5)

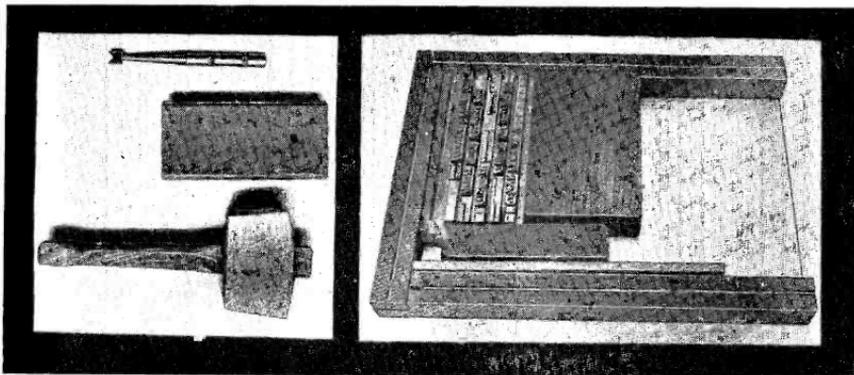
PAGE CORD, GAUGE AND SNIPS

(6 & 7)

5. This is a hank of PAGE-CORD, a strong, thin, specially-made printer's twine for tying up type-matter when it is set.

6. This is the compositor's GAUGE or ruler. It is made in plastic, wood or steel, the example shown being one of the new popular perspex. It is used for measuring type in various ways—in the stick, on the galley, in the forme, in pages, etc., and can also be used in the same way as an ordinary ruler.

7. These are SNIPS—strong, thick-bladed implements made of steel. There are two varieties—snips and shears, the latter being equipped with finger-grips like large scissors. They are used for cutting brass rule and lead, etc., but they have disadvantages as they cause the rule or lead to curl and often leave a burred edge. A small cutting machine is infinitely preferable if you wish to do careful work.



(8)

GALLEY AND IMPOSING TOOLS

(9)

8. The three implements you see here are, reading from bottom to top, a MALLET, a PLANER and a SHOOTING STICK. They are all tools used in imposing—that is, the securing of type-matter in the chase after it has been made into a job. The shooting stick is made of steel, the mallet and planer of hardwood.

In imposing the matter has to be secured or "locked" in the chase by means of wooden wedges called quoins. Most small printers start by using wooden quoins though there are other varieties which you shall hear about. To make the wood quoins fit they are tapped home with the mallet and the shooting stick, the "V" end of the shooting stick fitting over the fat end of the quoin.

The planer is a smooth thick block which is used for levelling the type when it is in the process of being locked up in the chase. It is run over the surface of the job and is gently tapped with the mallet until all is of the same height.

9. This is a GALLEY, a three-sided tray on to which type is lifted from the stick in order to be made up according to the instructions given with the job for which the type is composed. It can be purchased in a variety of sizes and materials and can easily be made by yourself (the one above is home-made, being constructed from a sheet of zinc and wood spacing material).

In this picture you see type resting on the galley, roughly secured at sides and bottom to prevent it falling over.



Selling Showcards

Salepoints of the Seasons

By VICTOR SUTTON

TO get orders you must have a good business card and carry some samples of your work. Don't promise the moon if you think you can't do the job offered. If you have an outstanding idea pick a firm to sell it to ; then spend some cash on a bus and go outside your own town to look for more business. To create something fresh is news and this will spread. Remember that tradesmen do foregather at Chambers of Trade and your efforts will soon be remarked upon.

Shopkeepers, particularly small ones, are independent in their method of business. It is not for the salesman to try and change that, but you will need tact in dealing with them. The hardest nut to crack will always remain a best friend and will most certainly send for you when he wants to get out something new in the way of showcards and tickets.

You must be observant and notice what the average shopkeeper puts in his window ; then work out something more attractive. Make out a local diary of events and get out some showcard schemes for them. There would be carnival week, probably a shopping week, and of course, Christmas is coming.

Scan the local papers and the larger county ones and you will find ideas which you can work out and put to local retailers.

Here are some ideas and they can all

be framed into advertisement material for tickets, showcards or even slips to give to customers. For the travel goods shop, sports dealer, clothier and a host of other shops we can have "Going Away For Your Holidays ?" For the motor sales depot we can use "Special Display and Service Week".

Summer, spring, autumn and winter (with Christmas as the high spot!) have their special colour importance from the display angle and can make business for the showcard-seller.

In catering for the various seasons I see no reason why you should not set up a suitable showcard on which the decorative part will suit a number of trades. In this case the retailer himself might be delighted to fill in his own little piece.

Your idea would work out something like this.

Christmas would have the traditional Father Christmas, snow scene, little Christmas trees, and so on. The main half-inch border could be in jade green—always a good shade for this time of the year. With a little thought you could devise a good collection for Christmas orders and then embark, with more time and thought, on the seasons of the year as they apply to the retailer.

Therefore we might have February 14th (St. Valentine's Day), which is becoming quite an event with gift shops. Here you would use red, white and pink, and your special features ought to be hearts, cupids and arrows.

The next important date to be followed would be March 21st (first day of spring). Your basic shades here must be apple and coral. Little tree groups, butterflies, and all sorts of outdoor life should be featured. Try a little scenic effect.

Easter comes along on an adjustable date and here you have a very wide and interesting field to cover. Build up your main shades in violet, purple, crocus and white. You can then introduce rabbits, chickens, birds, flowers and everything to suggest enjoyable outdoor life. Keep the treatment light.

Finally, just one word of warning. Don't try to impress the difficult buyer with what you have sold to "Brown's Stores". He would not be pleased ; he may hate this firm for all you know. Keeping your business successes to yourself is one of the secrets of success.

CHRISTMAS PREPARATIONS.—Now that the Coronation rush is over the wise small printer begins to think of Christmas. He is given a few timely reminders in the present issue of *Printcraft* and will find a great many more in our next issue which also contains a first-class sales article by our popular contributor, JOHN RAYNOR.



Announcing

the introduction of the latest and the most beautiful addition to the extensive range of Adana's Type-faces

24 point	<i>New Palace Script</i>
18 point	<i>A True Copperplate Script</i>
14 point	<i>With Perfect Continuity</i>

This type can now be cast on a normal shank without interlocking. Thus it can be set like normal type and produced at less than **half the cost** of previous true scripts.

Prices are as follows :

24-pt. (weight approx. 5 lbs.)	
3A 14a	11/- per ll
18-pt. (weight approx. 5 lbs.)	
5A 24a	11/- per ll
14-pt. (weight approx. 5 lbs.)	
	11/- per ll

A supply of special spaces and ends is included in each fount.

To Georgian Users.—Owing to the near-obsolete method of producing Georgian Script we are reluctantly compelled to take it off our list. The New Palace Script replaces it. We wish to assure you, however, that an ample supply of sorts is being kept in stock and though we cannot supply you with any more *complete founts*, odd sorts will still be available. If you decide to change over from Georgian to New Palace Script a generous allowance will be made for your Georgian providing it is in good condition and purchased during the current year.

ADANA (Printing Machines) Ltd., Chur

Street, Twickenham, Mddx.

Now it's

THE LUCKY FOURTEEN!

8 Subscribers Get "Out-of-the-Blue" Gifts and
6 Others Special Surprise Presents!

THIS gift scheme, as announced, is open to subscribers only. If you wish to become eligible for a generous Surprise Present you have only to get your name placed on our Subscribers' Register. Here are the ways in which you can do it.

1. Register direct in accordance with the directions given below.
2. Through your newsagent. Hand him your name and address and request him to forward it to us when he orders your copy or copies for you. London readers may order direct from our showrooms at 8, Gray's Inn Road, London, or from the Fleet Street Bookstall, Ludgate Circus.

All new registrations effected by August 22nd, 1953, will be included in the scheme.

Below are the names of the latest lucky eight plus an extra six who are now requested to write to us and claim the gift awarded. No gift can be despatched until the claim is received. Except in special cases the claim *must* be made between now and July 31st, 1953. If no claim is received by that date the gift will be added to the next list, which will appear in *Printcraft* No. 23. All claims should be sent to

"Printcraft" Gift Scheme,
The Adana Organisation,
15-18, Church Street, Twickenham, Mddx.

THESE READERS—PLEASE CLAIM!

The following EIGHT are awarded these gifts under our Subscribers' Scheme,

H. ALDWORTH, Aberkenfig, Glam. *One 8-inch Adana Composing Stick.*

W. DEMPSTER, Aviemore, Invernesshire. *Parcel of Assorted Fancy Cards.*

W. C. JEFFERY, Cosham, Portsmouth. *One fount of 14-pt. Cochin Italic, 4A, 9a.*

J. LEITCH, Whipton, Exeter. *Free subscription for six issues of "Printcraft" this award to follow when Mr. Leitch's present subscription expires.*

C. F. MILTON, Hitcham, Nr. Ipswich. *One set of Decorative Brackets.*

A. W. PALMER, Cowley Road, Uxbridge. *One set each Christmas and Calendar Samples.*

Y. WILLIAMSON, Robin Hood, Castleton. *Parcel of Christmas Greetings Cards.*

H. WOOD, Northfields Avenue, Blackpool. *One fount of 3-pt. Metal Rule.*

The following SIX Subscribers are each awarded a Special Surprise of *One set of Section A Christmas Samples* :—

A. E. ASHDOWN, Shelley Ave., Manor Park, E.12. L. C. EDWARDS, Hangleton Gdns., Hove, 4. E. G. HOLDGATE, Morton, Derby. F. H. LINK, Milner Road, Birmingham, 29. J. PICKING, Shevington, Nr. Wigan. A. G. WARRINGTON, Gold St., Cambridge.

BECOME A REGISTERED READER of "Printcraft and the Magazine Publisher" and so make absolutely certain of your following parts of "The Printer's Inquire Within", a free and post-free copy of each new number of "Chips of the Stone" and free participation in our Grand Surprise Presents Scheme. Send cheque or postal order to the Publishers, "Printcraft," 15-18, Church Street, Twickenham, Middlesex, and your copies will be posted to you as soon as they are printed.

Rates : 3 ISSUES 5/3 (sent to you by letter post)
6 ISSUES 10/6 (" " " ")

No. 23 of "PRINTCRAFT" will be published in September