

the matrices and moulds become necessary. The only practicable method of making types is by casting them singly. All attempts at making them by swaging, cutting or casting fifty or more at a time have proven utter failures.

The types are not finished when they leave the machine. There will be found attached to each a wedge-shaped jet, somewhat similar to that on a bullet cast in a hand mould.



UNFINISHED TYPE.

The loose types are placed upon circular tables, around which are seated nimble-fingered boys or girls, who pick them up at the rate of from two to five thousand per hour, at the same time breaking off the jets. A bur still adheres to the shoulder of the type, and this is taken off by the rubbers, who rub the sides of the letters on a circular table on which have been placed fine steel files, manufactured expressly for this purpose. The kerned letters then go to the kerning machine, where they are dressed without disturbing the kern or over-hanging part of the type. The types next go to the setters, who set them in long lines, ready for the dresser, who slips them into a long stick, turns them on their face, fastens them in a bench adapted for that purpose, and with a plane cuts a groove in the bottom, taking off the bur left in breaking off the jet, leaving each type with a pair of feet to stand upon, and then dresses off the under and upper sides, giving them the bright, silvery appearance so familiar in unused type.



FINISHED TYPE.

The picker now takes the types in hand, and, with aid of a magnifying glass, picks out each defective letter, which is returned to the melting kettle. They are then broken up into shorter lines for convenience in handling, when they are sent to the dividing room, where they are divided into fonts, each having its due proportion of the respective sorts, made into pages, wrapped into papers, sent to the office, packed, marked and shipped to the purchaser, or put upon shelves awaiting an order.

Let us go back and observe some other processes connected with this curious place. Many have undoubtedly wondered how brass rules, with their multifarious faces, are made. The brass is rolled into broad plates, varying in thickness with the purposes for which they are designed. These are cut in strips a little more than type height in width, which are clamped in an iron bench, where they are planed on the face to the pattern desired. Wave rules are made by a curious crimping tool, while the leader and fancy rules are milled by machinery—the larger faces by an engine lathe.

Metal furniture is first cast in hand moulds, in long pieces, which are placed in planing machines for the purpose of dressing the four sides. They are then sawed to the required length and sent to the finisher, where they are fitted to the sizes desired, insuring perfect accuracy.

Leads are also cast in hand moulds, in pieces about fourteen inches long. At one end, where it has entered the mould, will be found a large lump of metal, which is cut off with the lead cutter. The leads are then sent to the planer and shaved on both

sides, securing an even thickness for their entire length. They are then ready to be cut to any desired measure.

Singular to relate, comparatively few printers ever see any more of a type foundry than its business office, and, except from reading, know little or nothing of the various ramifications of a business more intimately connected with their own than any other. Those who have not already done so will find such a place one of the most interesting they can visit, and, withal, they will be apt to learn something that will be of value to them in the future. Visitors to the city, whether printers or not, will find in our foundry countless things to amuse, and, perhaps, instruct them.

We have just received "THE POETS AND POETRY OF PRINTERDOM," a collection of original, selected and fugitive lyrics, written by persons connected with printing; collected and edited by OSCAR H. HARPEL, editor of "HARPEL'S TYPOGRAPH." It is among the finest productions of the typographical art we have seen. The binding and exterior of the volume is chaste and beautiful, but the interior, with its high-grade, violet-tinted, gold-edged paper, is a very marvel of ornamentation; every PAGE, and even every ARTICLE, being profusely and yet tastefully adorned with every fanciful device known to the art. Mr. OSCAR H. HARPEL, of Cincinnati, has expended world of thoughtful labor on the book, but he has achieved a success, of which he, as well as those whose names are embalmed in its magnificent pages, may well feel proud. Those who fail to secure copies now, will have no future opportunity, unless perhaps at a greatly enhanced price, of obtaining a book whose like is rarely found in any libraries, save those of kings or the wealthy. The price (\$7) is by no means an exorbitant one. For sale by the DOMINION TYPE-FOUNDING COMPANY.

NEW TYPE.—To-day's FREE PRESS appears in a new outfit of type. That just discarded had been in use over three years, and although by no means used up, nor anything nearly as much worn as type ordinarily is before being discarded, the determination to keep the FREE PRESS in the very front rank of first-class Canadian newspapers has induced this improvement. It will be noticed that the new type is considerably smaller than that formerly used, consequently the quantity of reading matter will be correspondingly increased. A point, in this connection, worth mentioning, is the fact that the entire outfit is of Canadian manufacture, being the product of the Dominion Type Foundry, Montreal; and the fine appearance of to-day's paper is as high a tribute to the excellence of the same as can be asked.—DAILY FREE PRESS, WINNIPEG, MAN., NOV. 19.

OUR NEW DRESS.—The NEWS appears to-day in a dress of new type from the Dominion Type Foundry, which, for beauty of cut, thoroughness of finish, and adaptability to the work for which it is intended, will bear favorable comparison with the type of any other foundry on either side of the Atlantic.—ST. JOHN, N.B., DAILY NEWS, SEPT. 6.

We have just received one of Potters' Celebrated "Special" Presses. Price, \$1200. Prints Double Royal. A cheap press, but a good one. On exhibition at our foundry.

The Tramp Printers' Virtues.

Mr. Josh. T. Johnston, editor and proprietor of the BRANT UNION, Brantford, Ont., writes the AMERICAN NEWSPAPER REPORTER as follows:

I read with considerable interest your editorial on tramps in last REFORMER. On many occasions I have perused articles—editorial, contributed, and selected—in the REFORMER which started me "a-thinking," and occasioned an almost irresistible desire on my part to write to you. But the many calls of the country printing office have always interfered with my "good intentions." On this occasion, however, I must have my say. About a year and a half ago, when I started in business on my own hook, I determined that the tramp should have no cause to grumble at his treatment in the Union office. But, to guard against imposition by inferior workmen, I posted up placards to the following effect:

"TRAMP PRINTS,  
Look Here:  
If you are without curls  
MEANDER."

As a job, as artistic as the foregoing was intended to be, would have been incomplete without a cut. I procured one of Hartum's "What is it?" as the most appropriate embellishment to be had, and the walls and stairways of the office were at once decorated with the "work of art." The effect of the announcement was that every tramp who presented himself produced a musty tobacco-stained card from some Union or another, and in every instance he was used well. As nearly as can be judged, one hundred itinerants have put in an appearance. And, with a solitary exception, every man of them was a dead swindle. This, after a fair trial, is the record left behind by the tramp printer. Is it to be wondered at, then, that every tramp who has presented himself during the past month has been ignominiously shown the door? Let some of your "sympathetic, magnanimous correspondents" have a like experience for two months, instead of seventeen, and they will commence to hold the opinion that exists in this office.

BARGAINS.

- Dryden, Foord & Co. four-feeder Wharfedale, size Bed, 62 x 55; good as new ..... \$2,000
- Payne two-feeder Wharfedale, size Bed, 37 x 52; guaranteed good as new ..... 1,750
- Hoe Bed and Platen Printing Machine (Adams Patent), six rollers; prints double royal; guaranteed in good order ..... 2,200
- Single Large Cylinder Hoe Press, size Bed, 36 x 44; good condition ..... 1,200
- Northrup Power Press, prints double royal; fair condition ..... 400
- Demy Folio Wharfedale, size Bed, 19 x 24; with steam fixtures; in good order.... 300
- Gordon Franklin Cylinder, 14 x 22 inside of chase; an excellent press ..... 400
- Chromatic Job Press; half-medium; size inside chase, 13 x 19½; with steam fixtures; now doing good work ..... 350
- Half-Medium Oshawa Gordon; in good order ..... 300
- Eight-Medium Oshawa Gordon; in good order ..... 150
- Tuft's Patent Hand Printing Press, guaranteed in good order; Platen 24 x 28.... 200
- Champion Job Press, 8 x 12 inside chase.... 150
- Ruggles Card and Bill-Head Press..... 75
- One Ericson's Caloric Engine, made by W. Tripp & Co., Boston; 3 horse power; one year in use; cost \$800 gold ..... 500

BOOKBINDERS' MACHINERY  
FOR SALE.

NEW AND OF THE BEST MAKE.

- Tangye Hydraulic Press; Platen, 22 x 32; tested to 30 tons ..... \$350
  - No. 5 Embossing Press; new series; Sanborn. 350
  - Patent Backing Machine, do do 450
  - Power Sawing Machine, do do 200
  - Steam Glue Heater and Kettles ..... 70
  - 30 inch Forsaith Paper Cutter ..... 150
  - Shears and Table for Millboard (Hoe) ..... 70
  - Two Nipping Presses, each ..... 25
- For terms, &c., apply

The DOMINION TYPE-FOUNDING Co.  
MONTREAL.