

## A Description of the Offices of The Strand Magazine.

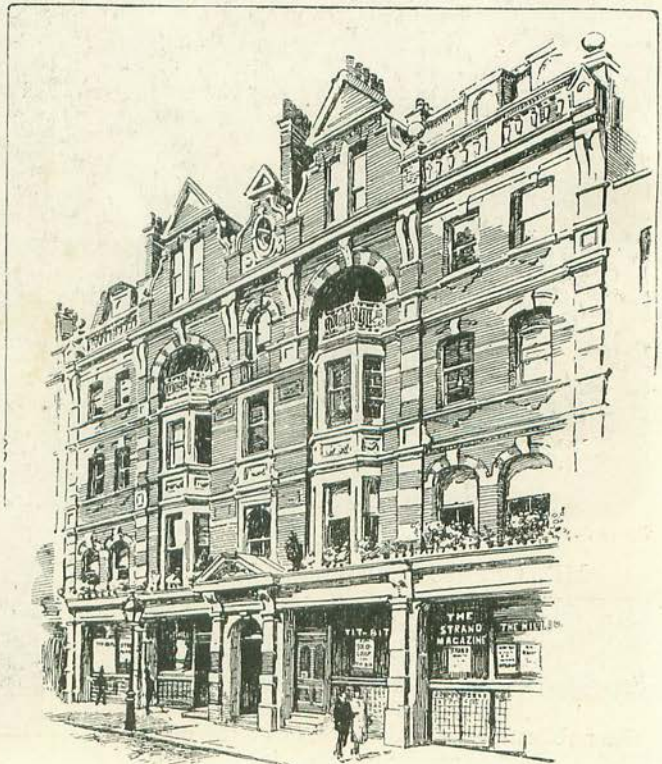
**V**ISITORS to these offices have expressed so much interest, and letters of inquiry have so constantly reached us from those who are unable to come themselves, that we think no apology is needed for the following brief description of the work involved in producing THE STRAND MAGAZINE and its fellow publications.

As one makes toward Covent Garden from the Strand, the most noticeable building in Southampton Street is seen to be the establishment of George Newnes, Limited. Its fine, broad front, wherein the architect has with a just hand distributed the red brick and white stone in the parts above the stone ground floor, stretches through four numbers on the right-hand side of the street, and the building is carried, in depth, through to Exeter Street, wherein stands a large "back front," as architects quaintly term it, itself of good dimension and appearance. It is at this "back front" that the heavy work of sale, cartage, crantage, and general in-take and out-go is carried on.

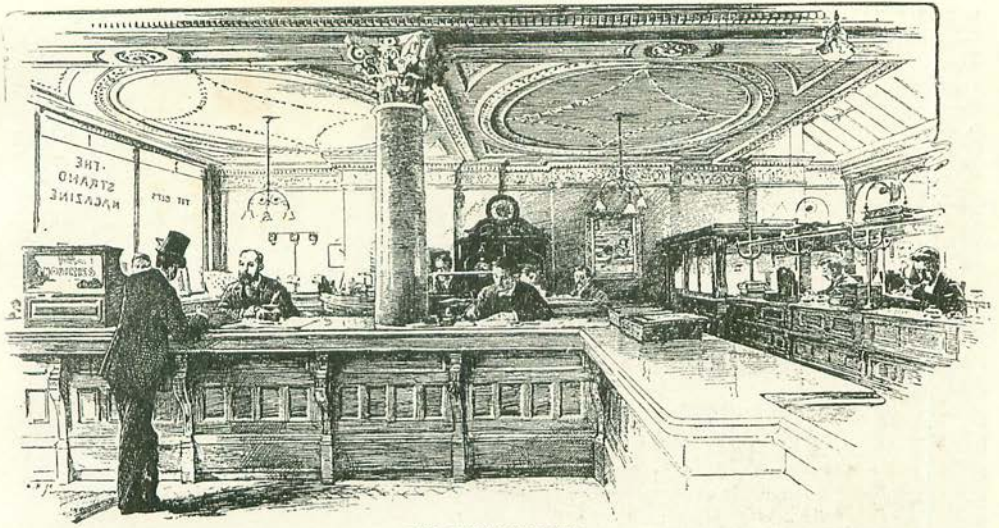
Between these two fronts lies much of interest—most of it open to inspection by the general public. In Southampton Street, a handsome, triple entrance stands between large plate-glass windows. Through the windows on the right, the curious may observe certain of the packing operations incidental to the issuing forth of THE STRAND MAGAZINE, *Tit-Bits*, the *Million*, and the bound volumes published by the firm. The windows on the left admit light to the counting-house. The counting-house one reaches by the left door. It is a spacious room, fitted and furnished in a handsome but business-like fashion, the ceiling decorated in various pale tints, and all the woodwork—counters, partitions, door-frames and so forth—of ma-

hogany. A very large double-doored safe, many brass desk-rails, certain telephone fittings, and various heavy account books combine to suppress the lighter suggestions of the elegant electric lights and the few wall pictures. Parts of this large room are partitioned off, including the sanctum of Mr. A. H. Johnson, the secretary to the firm, who is to be seen in the illustration talking to a visitor across the counter.

A door from this room takes one into the ground-floor corridor, leading direct from the central entrance. Here one chooses between the staircase on the right or the lift on the left. On the first floor, in the fore part of the building to the right, doors lead to the rooms in the more immediate occupation of Mr. Newnes. The chief of these, the sanctum sanctorum, is a large, pleasant room, something over thirty feet in length, with windows from which one looks into Southampton Street, over rows of flowers which stand upon the sills. The mural cover-



THE OFFICES OF "THE STRAND MAGAZINE."



THE COUNTING-HOUSE.

ing is a lincrusta of salmon pink, with a dado in a terra-cotta shade. All the joinery is of polished mahogany, the carpet is a velvet pile, and the ceiling is decorated in pale tints of salmon, green, and cream. Many original drawings for STRAND illustrations brighten the walls, and a high book-case hides such of the further end wall as is not occupied by one of the two fireplaces. The chairs are

upholstered in dark blue leather, and these, a small cabinet, and two tables constitute the chief floor furniture. Electricity is represented by telephone fittings communicating with every department in the building, as well as by the brackets and chandeliers of electric light. Mr. Newnes's own particular table is the upper large one.

On the right, double folding doors lead to



MR. NEWNES'S OFFICE.



MR. NEWNES'S OFFICE (GENERAL VIEW).

the room occupied by Mr. Newnes's private secretary, Mr. William Plank—a smaller, but still a good sized room, fitted and furnished in much the same manner, on a minor scale. From this the corridor is reached through a smaller room—the “White Room”—occupied at busy times, as *Tit-Bits* press day, by Mr. Newnes's editorial assistants. Here they are close at hand to the chief and secure from casual interruption.

At the opposite side of the corridor stands the Art Gallery—a place open every day, and all day, to the inspection of whomsoever may like to inspect.

The Art Gallery, which consists of two rooms, is devoted to the exhibition of the original drawings for the illustrations which have appeared in *THE STRAND MAGAZINE*. A large ottoman stands in the middle of the first room, the dull crimson of whose walls is only just visible near the ceiling, above the close covering of pictures.

The second room opens from this on the left, and contains, in addition to its many drawings, a side-board, whereupon are displayed a set of the carved electro blocks used for printing the various colours

in one picture in the *Million*. Of the hundreds of clever drawings hanging in these two rooms it is impossible to say more than that they include some of the best examples of the work of such artists as Sidney Paget, W. H. J. Boot, Gordon Browne, Paul Hardy, H. R. Millar, J. A. Shepherd, J. F. Sullivan, Jean de Paléologue, J. L. Wimbush, Louis Wain, W. B. Wollen, W. Christian Symons, G. C. Haite, A. Forrestier, W. Stacey, Harrison Weir, Frank Feller, J. Gülich, and A. Pearse; with many others of like abilities. All these drawings are offered for sale; but whether a possible purchaser or not, the passer-by will



THE PRIVATE SECRETARY'S ROOM.



THE ART GALLERY.

not waste the time occupied by a look round these two pleasant rooms.

Adjoining the Art Gallery stands the *Million* editorial office, occupied by Mr. Hartley

Aspden and Mr. Arthur Croxton, his assistant. The room is made cheerful by several of the original drawings reproduced in the *Million*. In all other respects the room and its furniture are suggestive of



OFFICE OF "THE MILLION."



EDITORIAL OFFICE OF "THE STRAND MAGAZINE."

nothing but strict business—a bookcase, desks, chairs, and many papers.

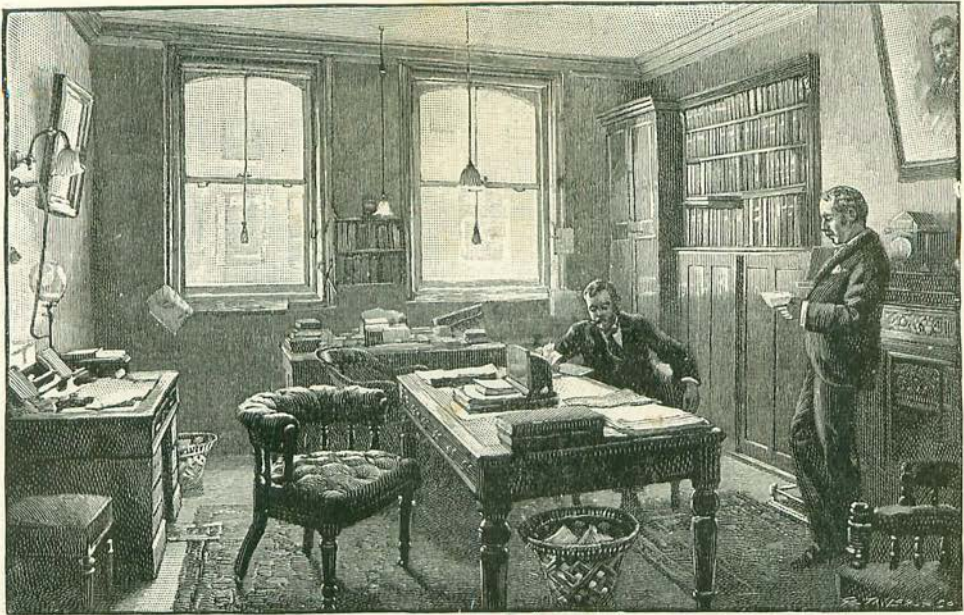
To the left, on the next floor, stands the editorial office of *THE STRAND MAGAZINE*, wherein, before the central writing-table, sits Mr. H. Greenhough Smith, in whose charge lies the selection and arrangement of the literary matter—the editing, in fact, of course under the supervision of Mr. Newnes—of

this, by far the most widely-circulated monthly in the country. This room also, with its bookcase, its cabinets for the reception of proofs and MSS., its telephones, and its many loose papers, is unmistakably a room for work.

Just so is the adjoining room, occupied by Mr. W. H. J. Boot, the Art Editor. Like Mr. Greenhough Smith's room, it overlooks



ART EDITOR'S OFFICE OF "THE STRAND MAGAZINE."



EDITORIAL OFFICE OF "TIT-BITS."

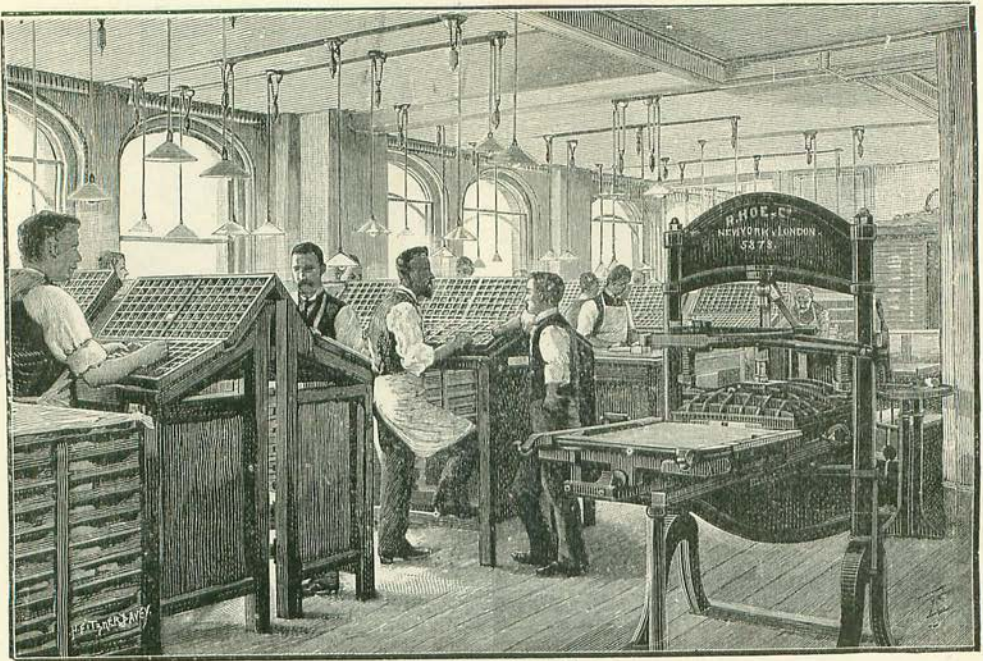
Southampton Street, and its permanent fittings are of a similar character—both pleasant rooms enough, with their framed sketches and padded chairs, but still work-rooms. Instead of MSS., however, many drawings, many wood-blocks, and many India-paper proofs litter the tables. Photographs of various-aged celebrities, and of their drawing-rooms and studies, are observable, lying in well-ordered confusion. There is a large magnifying lens mounted on a frame, and there are numbered drawers full of many clever pieces of artistry. The room behind, too, is devoted to the arrangement and storage of black and white drawings, and of current wood-blocks and electros. The table more immediately in Mr. Boot's constant use, near the window, is at once distinguishable by its plentiful litter of pencils and brushes.

On the opposite side a passage ends at the door of *Tit-Bits* headquarters. This is a light and airy room overlooking Southampton Street, and fitted with various writing-tables. Here is the sanctum of Mr. Galloway Fraser—who, under Mr. Newnes, conducts *Tit-Bits*—and Mr. J. L. Munro, who assists in the same work. In the illustration Mr. Fraser is standing. A large portrait of Mr. Newnes hangs over the mantel-

piece, and many books of reference occupy the surrounding shelves and cases. The usual electric lights and the telephone fittings for general communication are observable.



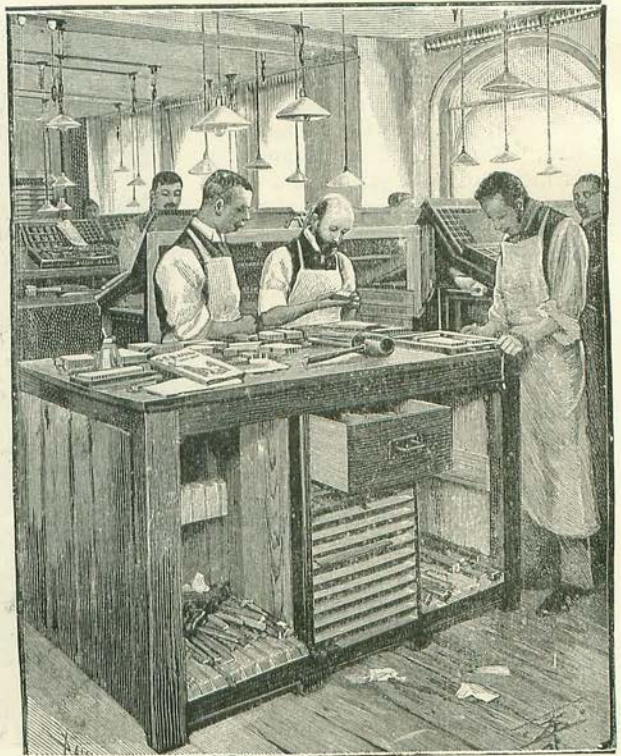
THE INNER ROOM.



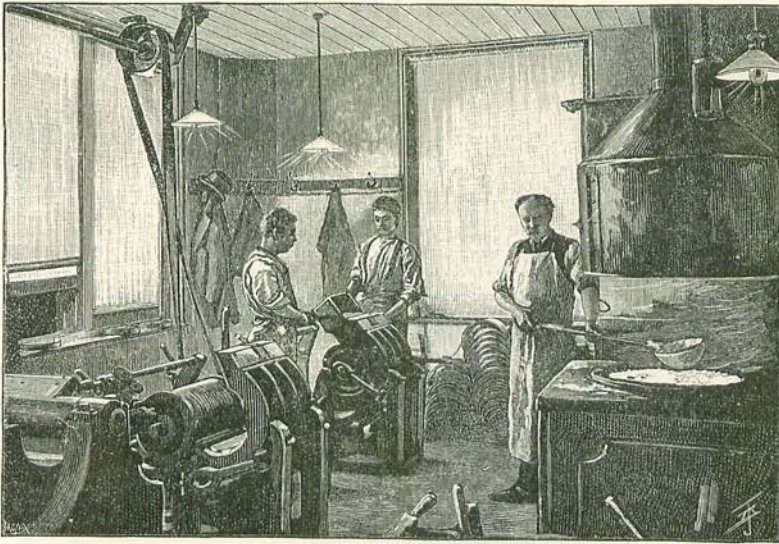
THE COMPOSING ROOM.

Leading from this is an inner room, containing, in addition to the ordinary furniture of a well set up private office, Mr. Harry How, who, besides his editorial work on *Tit-Bits*, is the writer of the Illustrated Interviews with celebrated people which form so prominent a feature in each month's issue of this Magazine. Here, in addition to a large portrait of Mr. Newnes, the walls are decorated with many photographic mementoes of Mr. How's interviews, with autographs of the notabilities operated upon. Among them is noticeable the last photograph ever taken of Cardinal Manning, Mr. How himself being included in the picture.

Now, when the work originating in these editorial offices goes out to be put into printed form, it first reaches the room at the opposite end of the second-floor corridor—the composing room. Here, under a little hanging forest of electric lamps, stands a little regiment of compositors, each man before his double case, filling his stick from his case and his galley from his stick, in the old familiar way of printers since printers were. When an article



LOCKING-UP "STRAND MAGAZINE" FORMES.



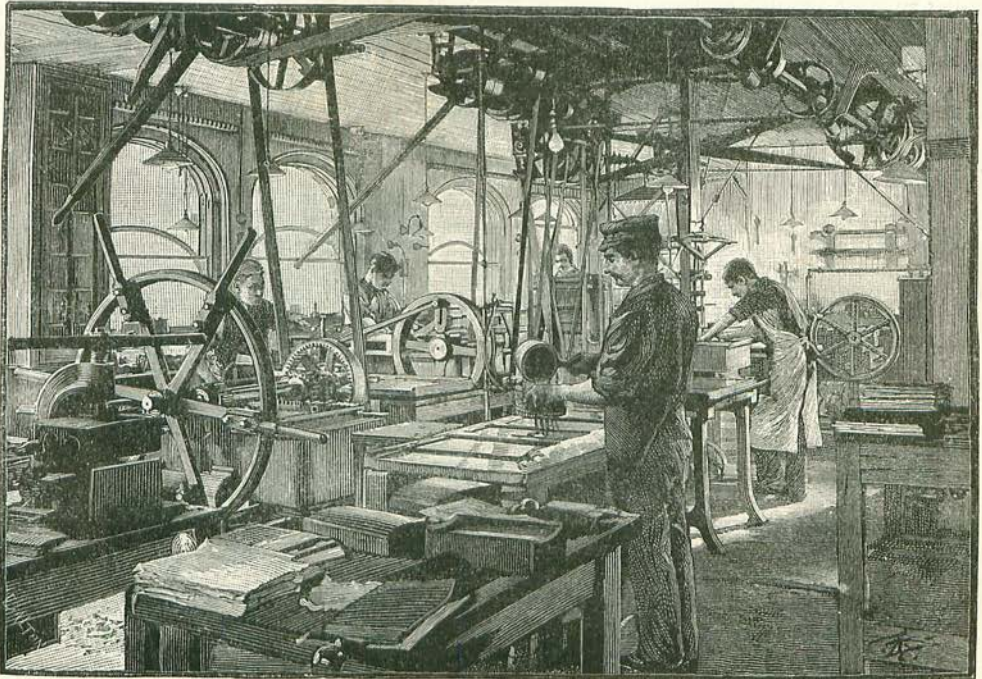
STEREOTYPING ROOM.

a hand-press, a few of which machines are here to be observed, kept only for proof purposes. When all the matter is corrected in this form, and all the illustration-blocks prepared of their proper size and shape, the type and the blocks, if any, are "made up" into pages, being fixed in iron frames, called chases. All this is very quickly said, and seems very simple, but numbers of cor-

rections and re-vises are made, and much labour, patience, and ingenuity expended in fixing the proper sizes of the illustrations, and fitting them to their proper places.

When at last the pages are "made up" and firmly screwed and wedged into their chases, the work is but begun. More proofs are taken and corrected, and the chases, with their contents, then go to the electrotyping department, at the top of the building. This workshop is the dirtiest and the most interesting in the place. The dirt cannot be helped—it is clean dirt, so to speak—and is simply graphite, or powdered black-lead, which, being an absolute essential to the process, gets everywhere.

But first let us suppose the made-up page



ELECTROTYPING ROOM.





ELECTROTYPING ROOM—WORKING ON THE PLATES.

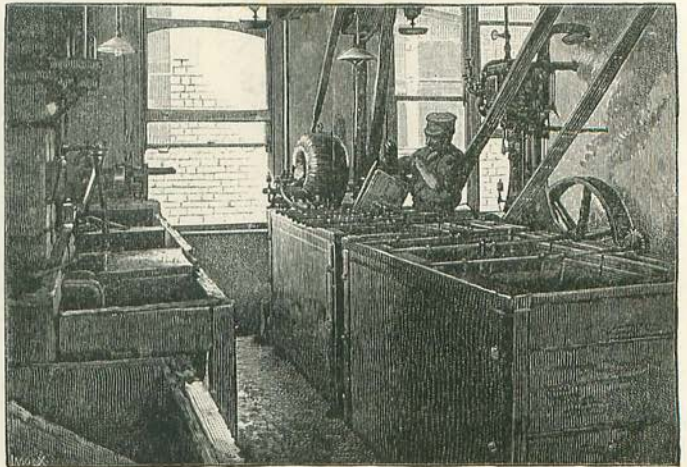
to be one of *Tit-Bits*, with no illustrations. This is not dealt with by electrotyping—it is stereotyped. First the “forme” of type is placed upon a flat plate, appertaining to a roller-press, and covered with a moist sheet of *papier-maché*. This is then passed under the press, so that the *papier-maché*, being pressed into the interstices of the type, comes away a perfect mould, or “matrix,” as it is called, of the page as set up. This matrix is dried, and, if found to be perfect, is inserted in the “casting block,” having first been dusted with French chalk. The “casting block” is a sort of massive cylindrical frame of iron, opening on a hinge—as shown by the illustration wherein are two “blocks,” one shut and one open. The interior of this “casting block” is so made that the matrix on being set in its proper place is curved inwards to a certain desired degree; the block is shut, and the workman, turning to the small furnace, takes a dip of molten lead in a peculiarly-shaped ladle, and pours it into the casting block. When set, this metal comes out in the form of a segment of a cylinder, having upon it raised letters in exact *fac-simile* of the original

type. This is carefully examined and touched up, the blank spaces being gouged deeper, the curve finally corrected on a saddle, and the back and edges planed true. It then travels down to the machine-room to be fitted upon the cylinder in the printing machine.

In the case of a page of the *STRAND* the procedure is different. First the type is carefully cleaned and dusted over with black-lead. Next a sheet of wax is obtained by pouring the substance, in a liquid state, into metal trays. This sheet, when firm, is shaved down to an exact thickness by a machine, the large wheel of which, with its projecting handles, may be seen in the illustration. Then it is placed upon the set-up type, and the two together are inserted in a special press—this one is, in fact, the only specimen in Europe—

which is tested to a pressure of 280 tons. When withdrawn from this press the wax sheet readily leaves the type, the black-lead preventing any adhesion.

It is then seen to be an exact counterpart, sunk and in reverse, of the type and illustration-blocks upon which it has been pressed. Having been carefully examined for the detection of any faults and “loaded up” with additional wax in blank spaces, it is given a complete but thin powdering of black-lead in a powdering machine, wherein a rotary brush drives the lead well into the surface of the wax. This is because the black-lead is a conductor of electricity, and is, as such, necessary in the subsequent

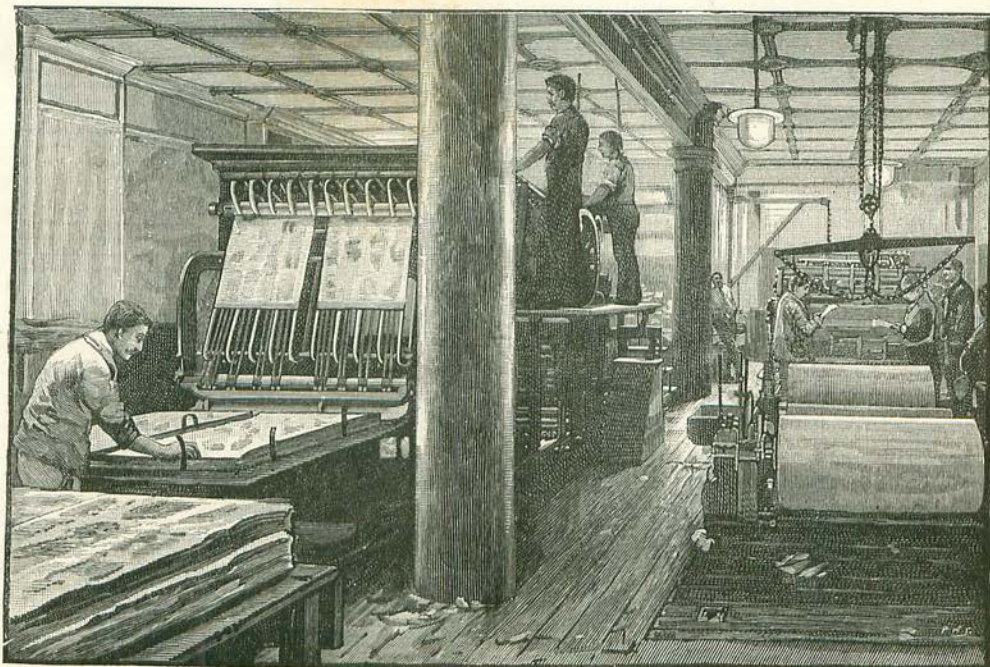


ELECTROTYPING ROOM—THE BATH.

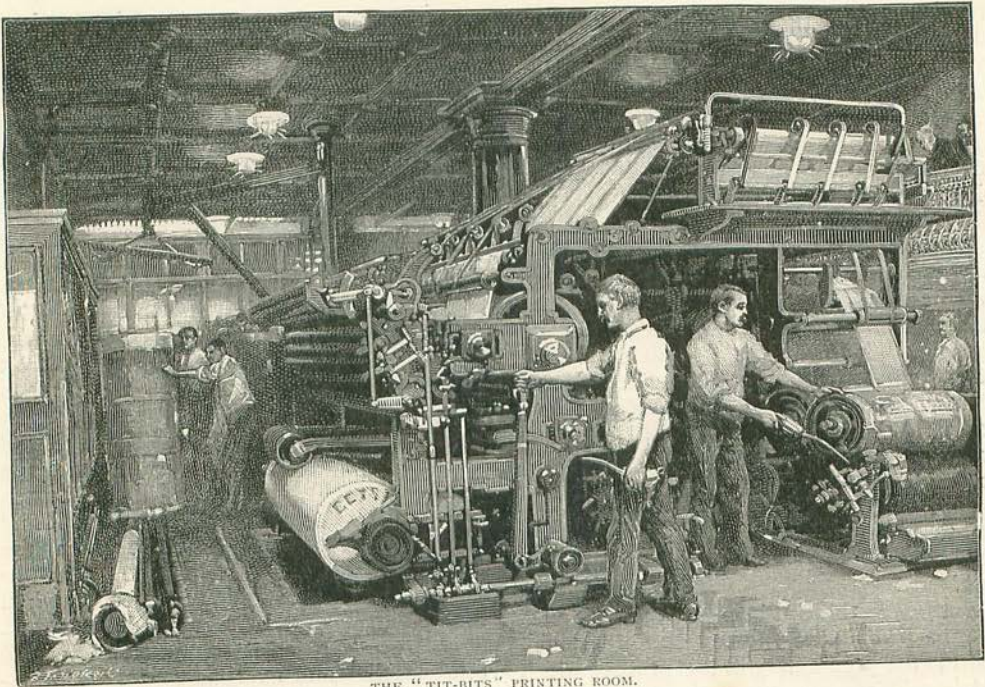
processes. After another careful examination and cleaning, the wax mould is immersed in the first plating bath, where it receives, by chemical action, a very thin first coat of copper. Next it goes into the copper-depositing bath, which is a large tank full of a forbidding-looking fluid, wherein the mould, with many others, is suspended from rods laid across the top. A dynamo buzzes furiously at the head of this tank, and dispatches electricity through its contents, liberating therefrom minute particles of copper, and attaching them to the thin film already deposited. The entire process might be gone through in this bath, but the chemical deposit is precipitated first for the sake of quickness. Some few hours of this immersion leaves a bright shell of copper, as thick as fairly stout writing-paper, upon the mould. This latter is then carefully washed away in hot water, and there remains an exact and delicate *fac-simile* in thin copper of the original page of type.

But before this can be printed from it must be "backed up." Another careful examination is the preliminary to this process, which consists in pouring upon the back of the copper shell a quantity of molten metal—principally lead—to a thickness of about a fifth of an inch, so as to make up a solid plate, with the printing surface in copper. The rough edges of this plate are trimmed off

with a fine circular saw, and another machine shaves it to the proper thickness. Then a skilled workman closely scrutinizes the plate for any inequality of surface caused by heat, etc., and cleverly beats it up perfectly flat; after which another machine is called into requisition, which shaves the edges exactly square and to size; still another machine finally shaves down the plate to the mathematically exact thickness required—a machine which can take off an almost transparent shaving half the thickness of tissue paper. Then a very exact piece of mechanism bevels the edges precisely to the correct angle required to fit the cylinder whereupon the plate is to be fixed for printing. After this, being placed upon a flexible piece of steel, the plate is brought between the jaws of the shaper, which, being heated by gas and air blast, close together and bring it to the proper curve to fit upon the printing cylinder. Then the plate is finally examined for minute defects, and, if found satisfactory, is sent to do its work. Such are the processes—in addition to some other smaller and subsidiary ones not necessary to explain—through which the metal surface from which this page is printed went before even approaching the printing machine. At any stage of the operations, even the final examination, a defect not easily remedied involves the casting aside of the plate and



"THE STRAND MAGAZINE" PRINTING ROOM.



THE "TIT-BITS" PRINTING ROOM.

the preparation of a new one from the beginning. In this electroplate and stereo-type department, with its complexity of overhead gearing, its grime of black-lead, and its smell of hot wax, there are no fewer than twenty-two entirely different *sorts* of machines at work; and it must be remembered that a deal of skilled hand-work is done with various additional tools.

When all these plates are prepared, of which no fewer than 460 are required every month, they are fixed upon the cylinders of the printing machines. And to see these machines, which for THE STRAND MAGAZINE alone are of three different sorts, we must descend to the basement. The most noticeable of these is the "Rotary Art Press"—the only one in Europe—which will print sixty-four illustrated pages at one revolution of the cylinders. Another is the Web Press, which will print and fold sixty-four pages at each revolution; and the third, a smaller "Stop Cylinder" Press, capable of very fine work, but printing only sixteen pages at a time, and covering 750 of such sheets on one side in an hour.

But before any printing takes place, the paper, in great rolls of more than two miles long, must be re-wound, and for this a special winding machine is provided, whereon the paper unwinds from its original roll and forms another. This liberates the electricity

with which new paper is usually highly charged, and which hinders and interferes with accuracy of the folding; it also facilitates the detection and cutting out of the inevitable faulty joins in the paper. Much depends on the paper, and great care is requisite in its use; it is often found that different reels of, to all appearance, exactly the same make of paper, for unaccountable reasons, produce entirely different results, good and bad.

Mounted on platforms attached to the Rotary Art Press are four men, whose business it is to "feed" the machine with sheets of paper. These sheets of paper are gripped by the machinery, and pass between two cylinders. The lower of these cylinders carries, firmly fixed to its surface, sixty-four plates of THE STRAND MAGAZINE pages, and sixteen inking rollers, supplied with ink from two fountains, ink these plates. The upper cylinder is simply the "impression cylinder," carrying no plates, its function being to press the paper against the lower. Thus only one side of the paper is printed at a time—it being found advisable in the case of fine work to allow one side to dry before treating the other. The printed sheets pass over and down on rows of guiding tapes, which keep them flat; they go four at a time, two on each set of tapes, and in the end slide over a light frame of laths, hinged at the bottom and looking like an exaggerated and very wide comb.

This frame swings forward and downward, and, depositing its sheets on the bench standing for their reception, returns for more. There are two such frames, depositing each simultaneously two sheets of sixteen pages each, and the machine can print 1,250 such sets of sixty-four pages in an hour. This is a bald description of the main features of the machine, which, wonderfully compact as it is, nevertheless is a mass of ingenuities. There is a deal more skill required in the printing of such illustrations as these pages contain than many are apt to imagine. For instance, there is the process of "over-layering"—an art in itself, and a difficult one. It consists in adding various

second plate cylinder, provided with another batch of thirty-two plates, which print upon it, exactly behind the original pages, thirty-two more. So far, the process has occupied less than two seconds. Still the paper travels on, and passes under a small cylinder with a hidden knife, which cuts the printed paper into strips four leaves long and two leaves wide. Still on these cut sheets are carried between endless bands of tape. Various complicated and unexplainable devices give each alternate sheet a quicker progress, carrying it over that which went before; under creasing blades and circular knives the paper passes, and in the end emerges



THE PACKING ROOM.

thicknesses in paper to the impression cylinder, in order that the impression on each plate shall be varied—the darkest shadows of the engravings receiving the heaviest pressure, the finest lines the lightest, and all intermediate shades in proportion.

The Web Press is a wonderful construction. At one end is observed an immense roll of paper unwinding into the machine at the rate of nearly two hundred feet a minute. This paper first passes over a jet of steam, which slightly softens—does not wet—its surface; next it passes under a cylinder covered with thirty-two curved printing plates, inked by seven rollers. This prints thirty-two pages on one side. Then it travels to a reversing cylinder, and presents its other side to a

in four-folded sections of eight pages each. Eight such sections emerge at each revolution of the cylinders all accurately printed, cut, folded and registered, and ready for the binder. At the side of the machine is a brass plate with glazed holes, behind which constantly changing figures denote the number of sheets turned out. Two lads are kept busily at work seizing the folded parts and packing them in boxes on trolleys; and yet, marvellously fast as the machine does its work, it is all with a regular, deliberate movement which seems almost slow.

The Stop Cylinder Press is a smaller machine, printing, as has been seen, at a comparatively slow rate, upon one side of the

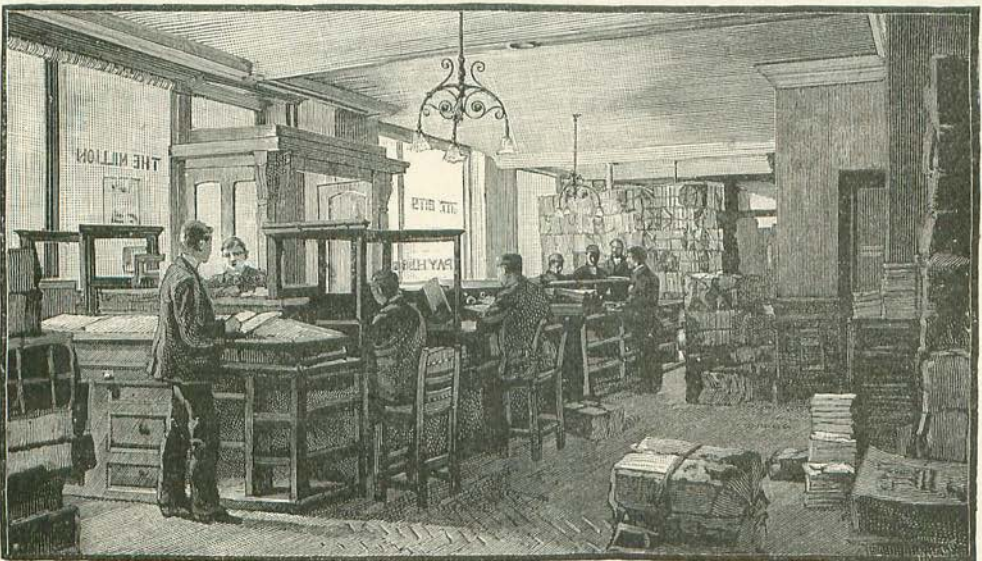
paper. It takes its name from the stopping of its cylinders, and is "fed" by hand.

The *Tit-Bits* machines, which, like the others, are manufactured by Messrs. R. Hoe and Co., are in number two, and larger than those we have seen. In addition to printing, they cut, fold, and paste the pages, turning the papers out complete, except for the edge-trimming. Here you see a machine which takes in, at two separate sides, rolls of white and green paper respectively, and turns out at a third side complete cut, covered, and pasted copies of *Tit-Bits* at the rate of something like seven a second. We have seen how the stereotyped plates are prepared. These, when fixed upon the cylinders, are inked by a system of twenty-four rollers to each cylinder. The paper, damped, is controlled in its passage to the cylinder by an automatic brake, which keeps it to its proper-timed pace. The cover is printed in what is, as a matter of fact, a smaller machine under cover of the larger one, and joins the white paper at the place where the covering takes place. As the paper runs through the machine it is pasted in the proper places from a paste-trough, wherein revolves a cylinder, from the surface of which the paste is taken and applied by a knife. The folding is effected by the paper passing over a series of triangular metal frames, apex downward. As the paper passes over the smooth surface of the frame it narrows towards the apex, and the paper doubles in the crease thus formed. The cover is attached in the

same way that the inner leaves are pasted together, and so, from each of these two large machines—each a double machine in itself—hundreds of complete copies of the paper fall every minute, numbered on the indicator at the side. In another part of the room is observed the apparatus upon which the paper is re-wound and at the same time wetted, ready to receive the impression. Above, a balcony stretches along the wall, from which visiting members of the public may watch the operations below.

After this there is only the publishing office, and the copy of *Tit-Bits* or THE STRAND MAGAZINE is launched upon the outer world. This office, on the ground-floor, is a great L-shaped room, or two rooms, as you please, one part extending along the Exeter Street front, and the other reaching away forward to Southampton Street. Between forty and fifty persons are employed in this department, under the direction of Mr. Harrison, the publisher, who, in the preceding illustration, is to be seen standing by the window with his hand on the table. From this place go, each Thursday, the many hundreds of thousands of copies of *Tit-Bits* which find their way into every corner of the world; and from here, on an ordinary month, issue out 114 tons of THE STRAND MAGAZINE.

The building was erected by Messrs. Colls and Sons, of 5, Coleman Street, the architect being Mr. J. T. Woodard, of Bedford Street, Strand.



THE PUBLISHING OFFICE.