

ANONYMOUS

***ILLUSTRATED
SCIENCE FOR
BOYS AND
GIRLS***

Anonymous

Illustrated Science for Boys and Girls

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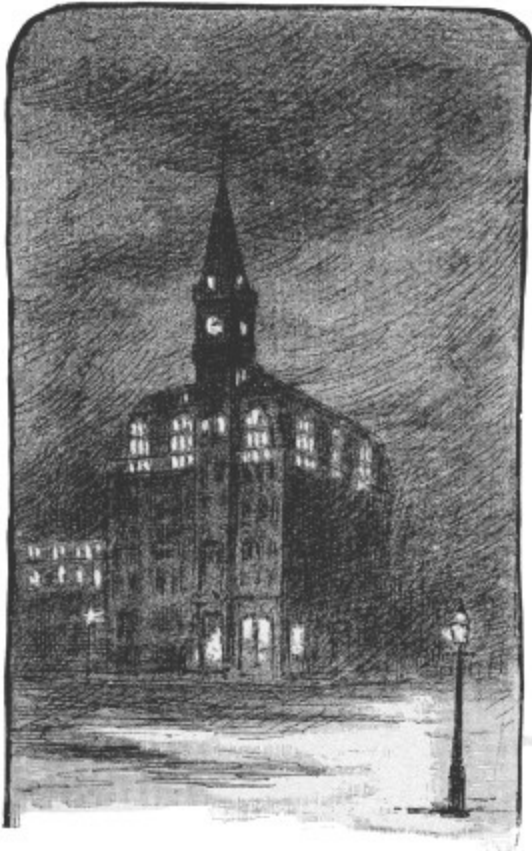
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We will suppose that it is a great newspaper, in a great city, printing daily 25,000, or more, copies. Here it is, with wide columns, with small, compact type, with very little space wasted in head lines, eight large pages of it, something like 100,000 words printed upon it, and sold for four cents—25,000 words for a cent. It is a great institution—a power greater than a hundred banking-houses, than a hundred politicians, than a hundred clergymen. It collects and scatters news; it instructs and entertains with valuable and sprightly articles; it forms and concentrates public opinion; it in one way or another, brings its influence to bear upon millions of people, in its own, and other lands. Who would not like to know something about it?

And there is Tom, first of all, who declares that he is going to be a business man, and who already has a bank-book with a good many dollars entered on its credit side—there is Tom, I say, asking first of all: “How much does it cost? and where does the money come from? and is it a paying concern?” Tom shall not have his questions expressly answered; for it isn’t exactly his business; but here are some points from which he may figure:

“*How much does it cost?*” Well, there is the publishing department, with an eminent business man at its head, with two or three good business men for his assistants, and with several excellent clerks and other employèes. Then there is the Editor-in-Chief, and the Managing Editor, and the City Editor, and a corps of editors of different departments,

besides reporters—thirty or forty men in all, each with some special literary gift. Then there are thirty or forty men setting type; a half-dozen proof-readers; a half-dozen stereotypers; the engineer and foreman and assistants below stairs, who do the printing; and several men employed in the mailing department. Then there are tons and tons of paper to be bought each week; ink, new type, heavy bills for postage; many hundreds of dollars a week for telegraphic dispatches; and the interest on the money invested in an expensive building; expensive machinery, and an expensive stock of printers' materials—nothing being said of the pay of correspondents of the paper at the State Capitol, at Washington, at London, at Paris, etc. Tom is enough of a business man, already, I know, to figure up the weekly expenses of such an establishment at several thousands of dollars—a good many hundreds at each issue of the paper.



THE N. Y. TRIBUNE BUILDING AT NIGHT.

“And where does the money come from?” Partly from the sale of papers. Only four cents apiece, and only a part of that goes to the paper; but, then, 25,000 times, say two-and-a-half cents, is \$625, which it must be confessed, is quite a respectable sum for quarter-dimes to pile up in a single day. But the greater part of the money comes from advertisements. Nearly half of the paper is taken up with them. If you take a half-dozen lines to the advertising clerk, he will charge you two or three dollars; and there are several hundred times as much as your small advertisement in each paper. So you may guess what an income the advertising yields. And the larger, the more popular, and the more widely read the paper, the better will be the prices

which advertisers will pay, and the more will be the advertisements. And so the publisher tries to sell as many papers as he can, partly because of the money which he gets for them, but more, because the more he sells the more advertising will he get, and the better rates will he charge for it. So, Tom, if you ever become the publisher of a newspaper, you must set your heart on getting an editor who will make a paper that will sell—whatever else he does or does *not* do.

“And is it a paying concern?” Well, I don’t think the editors think they get very large pay, nor the correspondents, nor the reporters, nor the printers, nor the pressmen. They work incessantly; it is an intense sort of work; the hours are long and late; the chances of premature death are multiplied. I think they will all say: “We aren’t in this business for the money that is in it; we are in it for the influence of it, for the art of it, for the love of it; but then, we are very glad to get our checks all the same.” As to whether the paper pays the men who own it—which was Tom’s question: I think that that “depends” a great deal on the state of trade, on the state of politics, and on the degree to which the paper will, or will not, scruple to do mean things. A great many papers would pay better, if they were meaner. It would be a great deal easier to make a good paper, if you did not have to sell it. When, then, Jonathan shall have become a minister, he doesn’t want to bear down too hard on a “venal press” in his Fast Day and Thanksgiving sermons. Perhaps, by that time, Tom will be able to explain why.

“How, now, is this paper made?” “But,” interrupts Jonathan, “before they make it, I should like to know where they get the 100,000 words to put into it; I have been cudgeling my brains for now two weeks to get words enough to fill a four page composition—say 200 words, *coarse.*”

The words which are put into it are, besides the advertisements, chiefly: 1. News; 2. Letters and articles on various subjects; 3. Editorial articles, reviews, and notes; 4. Odds and ends.

The *“letters and articles on various subjects”* come from all sorts of people: some from great writers who get large pay for even a brief communication; some from paid correspondents in various parts of the world; some from all sorts of people who wish to proclaim to the world some grievance of theirs, or to enlighten the world with some brilliant idea of theirs—which generally loses its luster the day the article is printed. A large proportion of letters and articles from this last class of people get sold for waste-paper before the printer sees them. This is one considerable source of income to the paper, of which I neglected to tell Tom.



A CONTRIBUTOR TO THE WASTE-PAPER BASKET.

As for the "*odds and ends*"—extracts from other papers, jokes, and various other scraps tucked in here and there—a man with shears and paste-pot has a good deal to do with the making of them. If you should see him at work, you would want to laugh at him—as if he were, for all the world, only little Nell cutting and pasting from old papers, a "frieze" for her doll's house. But when his "*odds and ends*," tastefully scattered here and there through the paper, come under the reader's eye, they make, I am bound to say, a great deal of very hearty laughter which is not that laughter of ridicule which the sight of him at his work might excite.



OFFICE OF THE EDITOR-IN-CHIEF.

About the “*news*,” I must speak more fully. The “*editorial articles, reviews, and notes*,” we shall happen upon when we visit the office.

A part of the news comes by telegraph from all parts of the world. Some of it is telegraphed to the paper by its correspondents, and the editors call it “special,” because it is especially to them. Perhaps there is something in it which none of the other papers have yet heard of. But the general telegraphic news, from the old-world and the new, is gathered up by the “Associated Press.” That is to say, the leading papers form an Association and appoint men to send them news from the chief points in America and in Europe. These representatives of the Associated Press are very enterprising, and they do not allow much news of importance to escape them. The salaries of these men, and the cost of the telegraphic dispatches, are divided up

among the papers of the Association, so that the expense to each paper is comparatively small. Owing to this association of papers, hundreds of papers throughout the country publish a great deal of matter on the same day which is word-for-word alike.

Two devices in this matter of Associated Press dispatches save so much labor, that I think you will like me to describe them.

One is this: Suppose there are a dozen papers in the same city which are entitled to the Associated Press dispatches. Instead of making a dozen separate copies, which might vary through mistakes, one writing answers for all the dozen. First, a sheet of prepared tissue paper is laid down, then a sheet of a black, smutty sort of paper, then two sheets of tissue paper, then a sheet of black paper, and so on, until as many sheets of tissue paper have been piled up, as there are copies wanted. Upon the top sheet of paper, the message is written, not with pen, or pencil, but with a hard bone point, which presses so hard that the massive layers of tissue paper take off from the black paper a black line wherever the bone point has pressed. Thus a dozen pages are written with one writing, and off they go, just alike, to the several newspaper offices. The printers call this queer, tissue-paper copy—"manifold."



REGULAR CONTRIBUTORS

The other device is a telegraphic one. Suppose the Associated Press agent in New York is sending a dispatch to the Boston papers. There are papers belonging to the Association at, say, New Haven, Hartford, Springfield and Worcester. Instead of sending a message to each of these points, also, the message goes to Boston, and operators at New Haven, Hartford, Springfield, and Worcester, *listen to it as it goes through*, and copy it off. Thus one operator at New York is able to talk to perhaps a score of papers, in various parts of New England, or elsewhere, at once.

But in a large city there is a great deal of city and suburban news. Take for example, New York; and there is that great city, and Brooklyn, and Jersey City, and Hoboken, and Newark, and Elizabeth, to be looked after, as well as

many large villages near at hand. And there is great competition between the papers, which shall get the most, the exactest, and the freshest, news. Consequently, each day, a leading New York paper will publish a page or more of local news. The City Editor has charge of collecting this news. He has, perhaps, twenty or twenty-five men to help him—some in town, and others in the suburbs.

His plan for news collecting will be something like this: He will have his secretary keep two great journals, with a page in each devoted to each day. One of these, the “blotter,” will be to write things in which are going to happen. Everything that is going to happen to-morrow, the next day, the next, and so on, the secretary will make a memorandum of or paste a paragraph in about upon the page for the day on which the event will happen. Whatever he, or the City Editor, hears or reads of, that is going to happen, they thus put down in advance, until by and by, the book gets fairly fat and stout with slips which have been pasted in. But, this morning, the City Editor wants to lay out to-day’s work. So his secretary turns to the “blotter,” at to-day’s page, and copies from it into to-day’s page in the second book all the things to happen to-day—a dozen, or twenty, or thirty—a ship to be launched, a race to come off, a law-case to be opened, a criminal to be executed, such and such important meetings to be held, and so on. By this plan, nothing escapes the eye of the City Editor who, at the side of each thing to happen, writes the name of the reporter whom he wishes to have write the event up. This second book is called the “assignment book;” and, when it is made out, the reporters come in, find their orders upon it,

and go out for their day's work, returning again at evening for any new assignments. Besides this, they, and the City Editor, keep sharp ears and eyes for anything new; and so, amongst them, the city and suburbs are ransacked for every item of news of any importance. The City Editor is a sort of general. He keeps a close eye on his men. He finds out what they can best do, and sets them at that. He gives the good workers better and better work; the poor ones he gradually works out of the office. Those who make bad mistakes, or fail to get the news, which some other paper gets, are frequently "suspended," or else discharged out-and-out. Failing to get news which other papers get, is called being "beaten," and no reporter can expect to get badly "beaten" many times without losing his position.



HOW SOME OF THE NEWS IS GATHERED

And now, Tom, and Jonathan, and even little Nell, we'll all be magicians to-night, like the father of Miranda, in "The Tempest," and transport ourselves in an instant right to one of those great newspaper offices.



TYPE-SETTER'S CASE IN PI.

It is six o'clock. The streets are dark. The gaslights are glaring from hundreds of lamp-posts. Do you see the highest stories of all those buildings brilliant with lights? Those are the type-setters' rooms of as many great newspapers. In a twinkling we are several stories up toward the top of one of these buildings. These are the Editorial Rooms. We'll make ourselves invisible, so that they'll not suspect our presence, and will do to-night just as they always do.



TYPE-SETTERS' ROOM.

Up over our heads, in the room of the type-setters, are a hundred columns, or more, of articles already set—enough to make two or three newspapers. The Foreman of the type-setters makes copies of these on narrow strips of paper with a hand-press, and sends them down to the Editor-in-Chief. These copies on narrow strips of paper, are called “proofs,” because, when they are read over, the person reading them can see if the type has been set correctly—can prove the correctness or incorrectness of the type-setting.