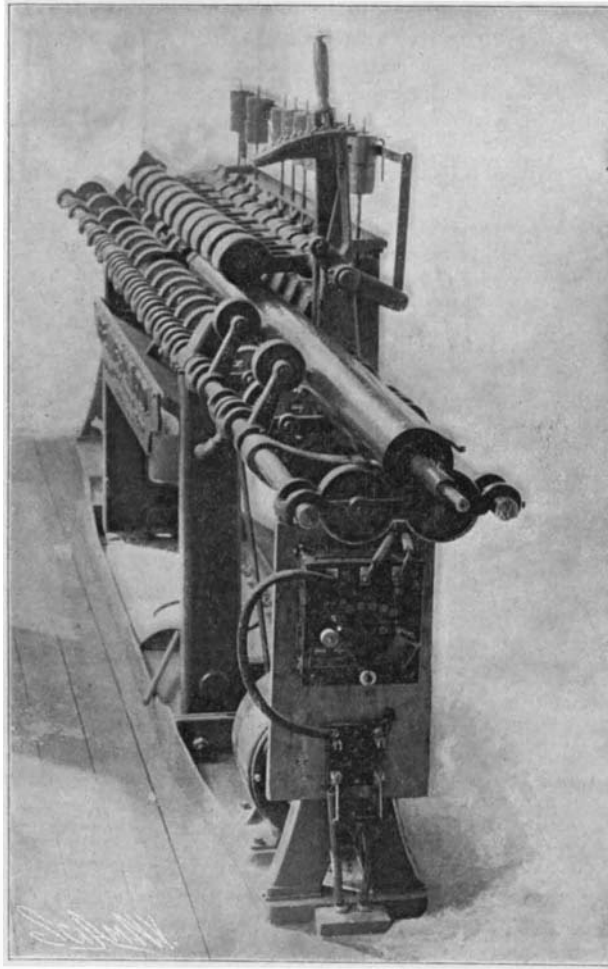


MECHANICAL "PRINTER'S DEVILS."

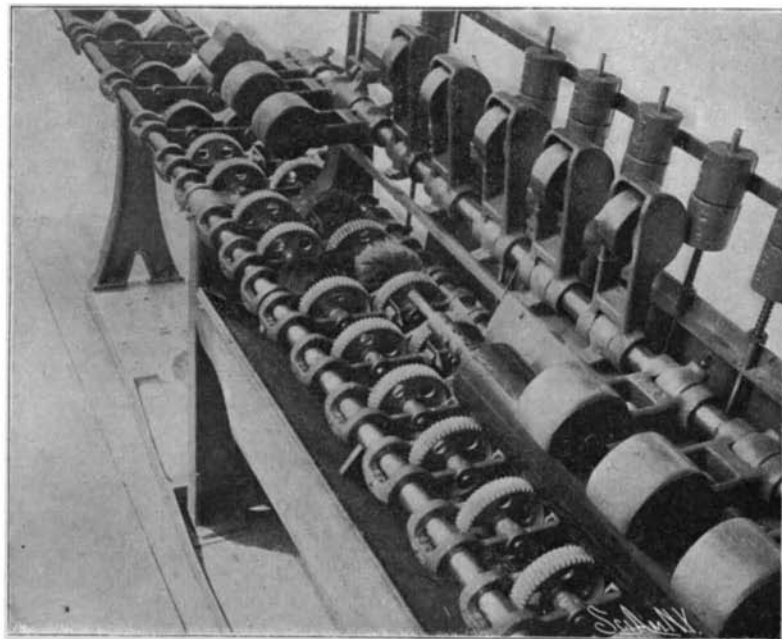
A "printer's devil" is to the lay mind the errand boy who comes for copy and brings proof. In reality he is nothing of the kind; a "printer's devil" is a roller cleaner, and at the end of the run or day he washes the ink from the composition rollers and puts them in boxes. Heretofore hand work has been used, probably because no satisfactory machine for doing the work had been invented. Now, however, a mechanical washer has been devised which will clean the rollers of eighteen presses.

The machine consists of a bed, to which are secured the various parts of the mechanism, an oil pump and a motor, which serves to actuate it. The lever at the top serves to set the machine for cleaning rollers from 1½ to 4½ inches in diameter; it raises or lowers tension rollers which are carried in gear cases. Each roller is counterweighted by divided weights, the upper section being provided with a hook which raises the upper weight when the rear bar is raised for washing small rollers. The roller feeds itself in, after once being laid on the bed, by the propelling or massage wheels, which are disposed in pairs throughout the central section of the machine. These wheels are set at an angle and serve to knead or massage the surface of the roller. Scrapers disposed vertically between the propelling or massage rollers take off the color, and at last it reaches a rotary brush which is opposed to a wheel made of sheets of leather; this empties all low places, cleans both ends and brings the solvent to the surface for the scrapers to remove, and it runs out on the delivery rollers dry and free from specks. The solvent used is kerosene oil, which is applied by the massage rollers. The foul oil runs down into a trough and thence into a pail having a wire cloth division. The oil enters one side, is filtered and is pumped up again by a rotary pump and used. The machine saves benzine and rags and above all the time of the press. This machine, like the lithographic washer, is made by the Printer's Roller Washing Machine Company, New York city.

Lithographic rollers differ from type rollers in that they are covered with leather, neatly joined. The surface must have the nap, if leather can be said to have a nap, raised so as to give it a hairy appearance. This, by hand work, is done by a scraper and sandpaper. It will be readily seen that the washing and graining of these leather rollers must be a long and tedious process. The machine consists of a long bed with a head stock, a tail stock and a movable carriage containing the scraper and grainer. The carriage is hauled back and forth by a chain. The roller is placed in position and clamped and the machine is started. The knives or scrapers, as will be seen in our detail engraving, where a portion has been broken away to show them, are six in number. These knives can be advanced toward the center like an iris diaphragm. One of the massage rollers will be seen in the center. The turpentine or other solvents are supplied unstintedly and practically cost nothing, as they are fed to the massage rollers, which work directly upon the surface of the roller, regardless of how old and hard it may be.



A MECHANICAL "PRINTER'S DEVIL."—WASHES ROLLERS FOR EIGHTEEN PRESSES.



Brush Massage Wheels Roller

DETAIL OF THE TYPOGRAPHIC ROLLER WASHER.

The scraping device follows, which grasps the full circumference and at one cut the turpentine and color is exudated and dropped into a catch basin, which in turn drains into the supply bottles and is employed again and again for rollers caked with the same colored ink. Each color has a separate tank, so as to favor the separation by gravity and quickly allow the turpentine to come to the surface.

The rollers are now ready to grain. Small disks are disposed over the roller. These have each four saw teeth inserted in them. They are rotated at a thousand revolutions a minute by the medium of a shaft and bevel gears. Power is derived from a slotted shaft which permits the bevel gears to

move with the carriage. The roller is run under the grainer, which gives it its slightly hairy surface. The machine turns out a dry, clean roller, untouched by sandpaper and rags; consequently free from lint. The operator can work with clean hands. The saving in time is very great, as the machine will do the work in one-fifth the time and the waste of leather is reduced to a minimum.

Newspaper Syndicates.

An extension of the scope of the newspaper, during the last twenty years, to include subjects of more lasting interest, led to the creation and extension of the so-called "syndicate," which furnishes papers with miscellaneous reading matter, as the news-gathering association furnishes them with news. The syndicate was introduced about 1884, for the purchase and sale of stories, but has since extended its field to all sorts of reading matter. While the news-gathering associations are largely co-operative, the syndicate is purely a proprietary affair, buying articles from authors and selling them outright to the different newspapers on their list of customers.

Some syndicate matter is sent out in matrix form, but most of it is supplied in the shape of galley proof, to be set up in the office of the newspaper purchasing it, in the general style of the paper.

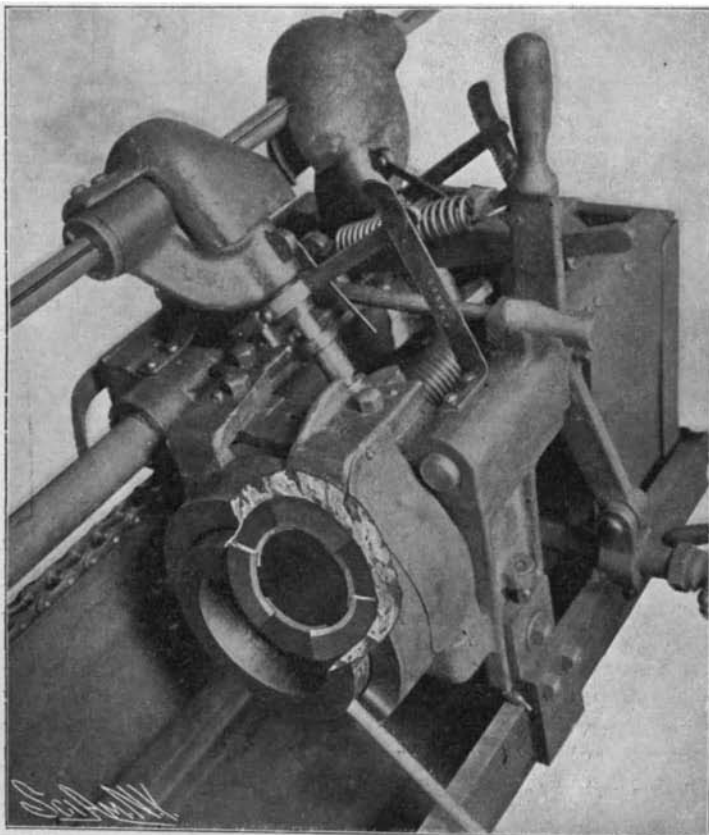
Most of the syndicate material is prepared especially for the Sunday supplement or magazine part of a newspaper, but the syndicates will furnish almost any class of articles found in daily papers. In making sales, the syndicate has a fixed price for articles, and although it disposes of the same stories or other matter to a number of papers, only one in each city or field of publication may receive a given story or article.

The syndicate is enabled, by its sales of the same article to many customers, to purchase matter quite out of the reach of the individual newspaper, and to sell it on terms that each can afford. The scheme is found to be so advantageous that to-day practically all the newspapers of the country, except some in a few of the largest cities, use syndicate matter to a considerable extent.

Besides the firms engaged primarily in the syndicate business, certain leading metropolitan newspapers dispose of their own matter to papers published elsewhere.

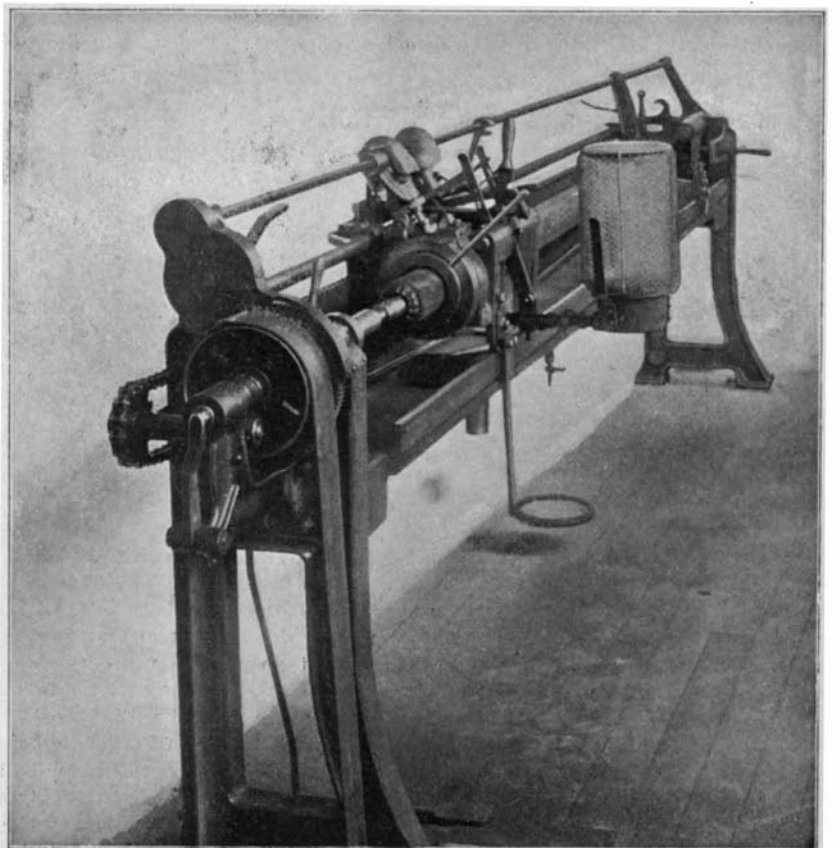
The Rapid Extension in the Gathering of News.

In 1886 the New York World reported the battle of Majuba Hill in six lines, but so rapid was the extension of news gathering that, fourteen years later, events in the same quarter of the globe were reported to the great American dailies by cable as fully as though close at hand. The destruction of St. Pierre, Martinique, in 1902, by an eruption of Mont Pelee, may be mentioned as an illustration of this tendency. Cablegrams concerning that great disaster reached American newspapers by way of Brazil, the Azores, and Great Britain, costing the recipients from \$2 to \$4 per word, with fees for precedence.



Knife Graining Wheel

DETAIL OF THE LITHOGRAPHIC ROLLER WASHER.



AUTOMATIC LITHOGRAPHIC WASHER AND GRAINER.