

and cheapness. It is being rapidly adopted in England. The *Weekly Despatch* and *Glasgow Citizen*, the *Globe* and *Weekly Times*, and the *York Herald* all have Marinoni presses. In Paris *Le Figaro*, *Le Rappel*, *L'Estafette* and *L'Ere-ment* are indebted to M. Marinoni's invention for their impressions. In the United States, Hoe, determined to keep up with the movement of the times, produced a web-feeding perfecting press with folding attachment, which has commanded much attention. It is a beautiful piece of machinery, and has already made a foot-hold in England, where his old six, eight and ten cylinder rotary presses have been discarded, and, indeed, may be purchased for the value of the metal. The latest American press is the Campbell. It is said to do excellent work, but it has not yet been competently tested.

While inventors had thus been paying almost exclusive attention to machines intended to print from stereo-plates, it was apparent that there was a great want to be filled in the production of a perfecting machine that would turn out the sheets directly from the types. All the presses we have enumerated require as adjuncts to the establishments in which they are used costly stereo-apparatus, and while to journals like the *Times*, *Telegraph* or *New York Sun* and *Herald* the advantage of multiplying the forms is of immense importance, stereotyping offers no advantages to papers having a circulation under 25,000 that compensate for the necessity of having to use immovable type. And with afternoon newspapers issuing several consecutive editions, the breaking of the form every two hours to insert new matter precludes any possibility of using stereotyped plates. From the small size of the type cylinders and the sharp-

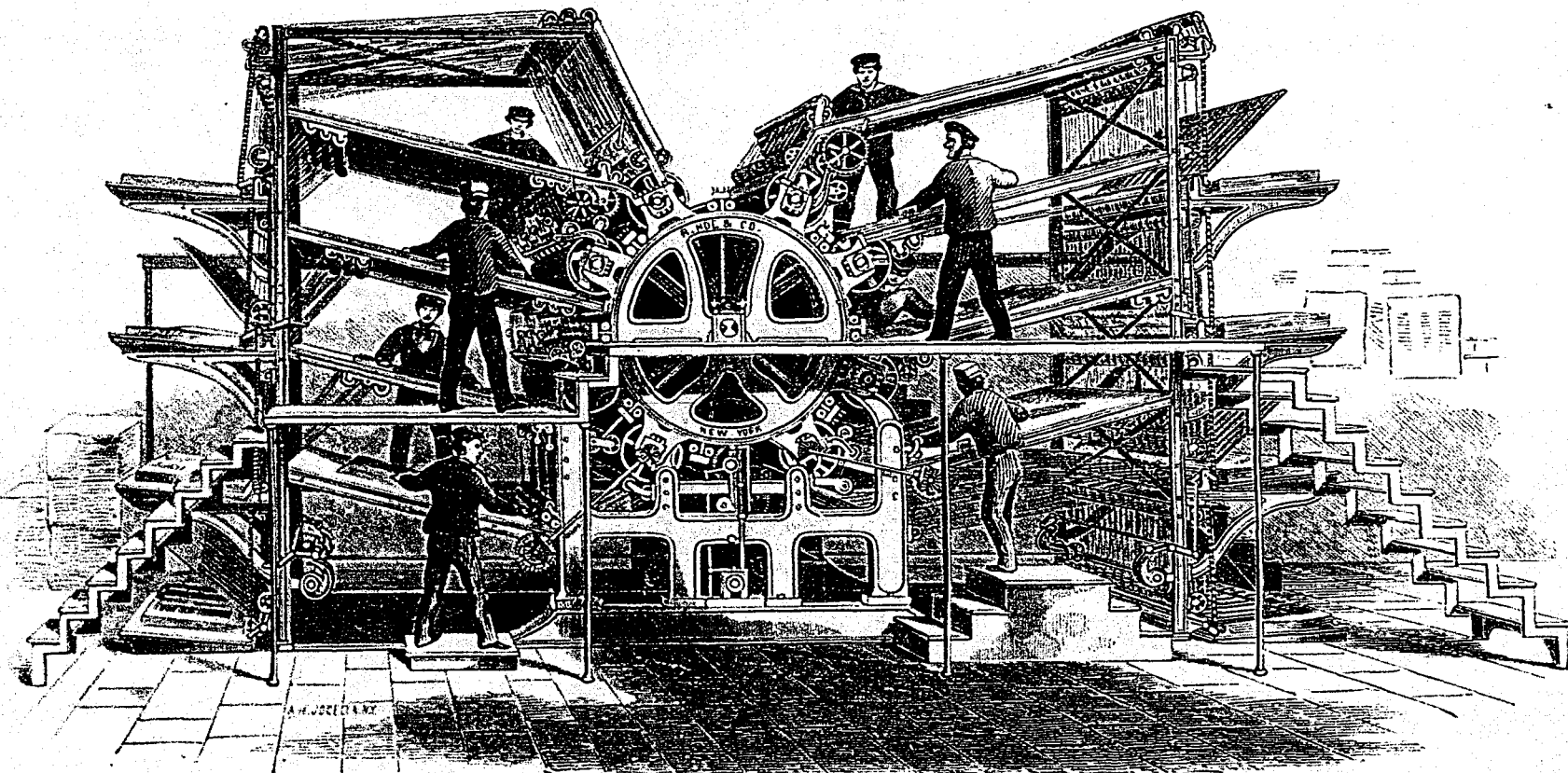
ed. Suddenly doors fly open, a great mass of metal is rapidly wheeled over the floor on a carriage. It is the turtle, weighing about 400 lbs., this is immediately seized by the foreman and two assistants, who trice it up with a block and tackle, and place it upon the drum nearest the cutting-gear. In less than half a minute the turtle is clamped to the drum as securely as if it were a solid part of the machine, the pressman is down from the board and turning the handles, while an assistant stands at the "fly" to take the first two or three sheets from the tapes. Then with a grumble and a shriek, the whole mass of seventeen tons of machinery starts into impetuous life, and faster than the eye can follow, *Stars* are falling in a stream, printed, cut and perfect. The process may be described, but one requires to see this glorious machine at work to realize its completeness and the majesty of the conception of which it is the conception.

The process is as follows. The roll of paper, from 2 to 3 miles long, and weighing sometimes 400 lbs., is hung at the end of the machine upon a spindle. Its first contact is with an impression cylinder, which prints one page, and, as a carrying cylinder takes it along; a second impression is received, and when the third cylinder has made its impression one side has been printed. Then the web travels to the second drum, which takes the other side of the paper and prints it, with the assistance of course of a series of impression and carrying cylinders which are seen on top of the machine, and are the counterpart of those below. Three perfect impressions have been given, and three papers printed in each single revolution of each drum, and all that remains is the cutting and delivery.

moment the web is hung to the bed and the belt drawn upon the fast pulley it takes care of itself. All it requires is to be fed with paper; that done it requires no assistance. What in the Hoe Rotary press requires to be done by numerous assistants it does by itself, and infinitely better. While the rules for its management are preserved, it knows no caprice, and its working is not dependent upon the caprice of others. It whirls and clanks away until its work is done, and then, with a cheery roar, at a touch it sinks into rest. It will print a thousand papers while you are taking a look at it, and pile them up neatly and expeditiously for the assistants to carry to the busy folding machines in the next room. If you stay long enough you will see an immense edition turned off, folded and distributed, amid a scene of orderly bustle and organized hurry-scurry such as is not to be seen anywhere outside of a well-managed printing office. The printing and delivery departments of the *Star* are studies of human and mechanical activity during the hour in which the last edition of the paper is being put in the hands of the public such as are not often to be met with.

As a matter of economy to publishers of largely circulated papers, the advantage of using a press like the Prestonian is a great consideration, especially as regards manual labour. For the old fashioned Hoe Rotary press, it is necessary that the paper shall be taken from the reams, opened, damped and piled to saturate, then removed and carried to the press. This is work for many hands. The damping of the web for the Prestonian is accomplished by a machine that unwinds the paper, passes it over a zinc cylinder revolving in a trough of water, and reels it up again in condition for printing. All that is required

offensive to those around him. If any disease deserves the name of universal, it is this. Dietetic errors and the follies which Fashion imposes upon us tend to foster and disseminate it. To the pitiful cry of its victims, is there any cure for Catarrh? there is but one answer consistent with Christian reason. God has never sent one evil into the world for which he has not sent the remedy. For the greatest of all spiritual and moral evils, the Great Physician has prescribed a potent and never-failing remedy. He has given explicit rules for the treatment and preservation of the spiritual and moral man, but He is silent in all matters relating to the physical man. It would be an unwarrantable deduction from His beneficent character to suppose that He has afflicted the greater portion of humanity with an incurable disease. The day of plagues is past. The God of Christianity is a God of Love, of Mercy, His message is "good-will to all men." The earth and all contained therein was intended by the great Designer to supply man's wants; and surely he has no greater wants than remedies for his infirmities. Science is man's uttermost need. New medicinal plants are constantly being discovered and new properties developed from those already known. For Catarrh, the most potent remedy yet discovered is Dr. Sage's Catarrh Remedy. Its efficacy has been tested in many thousand cases with uniform success. Cases that had been repeatedly pronounced incurable, readily yielded to it. In confirmed or obstinate cases, Dr. Pierce's Golden Medical Discovery should be taken in connection with the use of the Catarrh Remedy. Full particulars in Pierce's Memorandum Books. They are given away by druggists.



THE OLD STYLE, HAND FEEDING.

ness of the curve it is impossible to use type with any of the machines we have mentioned thus far, and had not ingenuity devised a way out of the difficulty the discovery of the web-feeding process would have been of little avail to a number of journals enjoying a large circulation. To meet the difficulty and fill the want, the Prestonian Press was designed by Messrs. Foster, Bond and Toulmin, of Preston, England. The Prestonian is the pioneer among machines of its order, though it has not the prestige of being the first or second among web-feeding machines. It is different in its action from any machine yet invented, and as yet its principle has been unapproached. Its qualities have been demonstrated so favourably that it has in the London *Standard* establishment displaced the Hoe web-feeder, and its claims to superiority from the advantages of speed and efficiency are being widely acknowledged.

The Prestonian, like the "Walter," "Bullock," "Marinoni," and all other perfecting presses, prints from a web, or roll of paper, specially manufactured for newspaper use. The type is secured in turtles, somewhat after the Hoe process, but much simpler, and placed upon two large drums, revolving in opposite directions. The inking is effected by the simple arrangement of rollers taking ink from fountains at either end of the machine. Each drum prints a side of the paper from the type in the turtles, while its surface acts as an ink distributor.

Suppose we stand in the press room of the *Star*, where the only web-feeding press in the Dominion is to be seen, and watch the last, or six o'clock edition being struck off. Everything is very quiet before the "form" is rolled out from the composing room. The pressman sees the rolls of paper are in readiness, and, in receiving orders from the manager notes under an automatic indicator how many papers are want-

The long printed ribbon passes through a pair of rollers and is carried by tapes to the cutting cylinders. One of these contains a knife with a saw-like edge, which falls into a groove in an opposite fellow, and as the paper passes, the knife whirls round and makes a complete perforation at each revolution. The *Stars* are rushing through, however, at the rate of ten thousand an hour, and how to deliver and pile this enormous number is a serious question. The machine is prepared to meet this difficulty. The papers are not entirely severed from the web, but by a special arrangement as to speed are taken to a pair of breaking rollers, whence they descend to an oscillating frame work of steel and tape, which swings between two sets of polished rollers. It delivers a paper easily and gracefully to each, and as one passes underneath and is brought up in time to meet the next descending, it is met by its latest coming neighbour. The twin then run along a tape until a self-acting "flyer" falls and deposits them upon the pile. The delivery of the papers in pairs is as novel as beautiful and useful: the frame oscillates so regularly and yet with such irresistible force as to attract the attention of the least interested observer. When the machine is at full speed, clanking forth its messages of intelligence to the world, the perfect sheets are deposited on the delivery board in a perfect shower: the eye cannot follow the motion, though through the roar (for printing is always noisy) one can distinguish the quick fall of the flyer, and it is possible to see the figures in the indicator, which automatically and unfailingly marks every paper printed, from 0 to 100,000. The machinery of this press, in some parts enormously heavy, is as evenly balanced as the movement of a chronometer. While its velocity is almost inconceivable, it is held in control by a touch, and may be stopped by a touch. In its automatic precision it is startling. From the

is to roll the paper to the machine, and back to the press. Then, as only one side is printed at a time, on the Hoe machine it is necessary that double labour shall be expended in handling the sheets, and, should the supply of "outsides" by any means fall short, there is no means of supplementing them without great sacrifice of time. The web-feeder press prints as many as papers are wanted without any trouble, so long as the forms are on the drums.

For these reasons, which are the weightiest that can be adduced when practical printing is concerned, the Hoe Eight and Ten Cylinder presses have been universally discarded by papers enjoying a large circulation, and web-feeders are being adopted in their place. The Hoes will now gladly sell the old-fashioned presses at the price of old iron, and in establishments conducted upon business principles, they would be extravagantly dear at that.

Of the papers using web-feeders we may cite the following: *London Times*, *Telegraph*, *Standard*, *Daily News*, *Echo*, *Lloyds*, *Post*, *Chronicle*, *Globe*, *Scotsman*, *Glasgow News*, *Liverpool Post*, *Manchester Courier*, *Leeds News*, *Dundee Advertiser*, *Glasgow Mail*, *Edinburgh Courier*, *Freeman's Journal*, *Irish Times*, *Melbourne Age*, *Leeds Mercury*, *Bristol Western Press*, *Petit Journal*, *Petit Moniteur*, *Figaro*, *L'Ere-ment*, *Le Rappel*, *L'Estafette*, *La République Française*, *Paris*, *El Imparcial*, and the *Diario*, *Madrid*, *New York Herald*, *Tribune*, *Times*, *Sun*, *Boston Herald*, *Christian Union*, *Philadelphia Press*, *Times*, *Chicago Times*, and *Tribune*, *New York Witness* and *Montreal Star*.

THE IMPORTANT QUESTION.

Of all loathsome diseases Catarrh stands pre-eminent. It renders its victim as disgusting to himself as to others. And the most humiliating of all is the consciousness that his presence is

MUSICAL AND DRAMATIC.

THE American telephone instrument, which can transmit sounds of an organ by the electric wire, has failed as yet to make the voices heard.

M. Saint-Saens, the distinguished composer, intends to travel in various countries and to give piano recitals. He has resigned his position as organist of La Madeleine, in Paris.

MR. MAPLESON is said to have secured the greatest tenor of the day, before whom all other aspirants to the mantle of Mario must bow down. The name of this gifted artist is Eugenio de Cabero.

MR. STRAKOSCH intends, it is said, to bring the telephone to England, and to play the first air in England on her Majesty's Birthday, the 24th of May. "God Save the Queen" will be played in Liverpool, and heard in Buckingham Palace.

Les Cloches de Corneville, which has just been brought out at the Folies Dramatiques, is the pleasantest little piece that has been played since *Madame Angot's* daughter warbled her loves and tuned her distresses with such surprising success. The music is by M. Planquette.

AIMÉE is as dashing as ever, winks as significantly, but sings better than she ever did. She has become very sedate, however, in a general way. If we are to believe the gossips, it is her diamonds that causes the soberness. She has £100,000 worth of the baubles, which places her in a continual fear lest they be stolen. Those she wears on the stage are paste.

"No need of having a gray hair in your head," as those who use *Luby's* *arisan Hair Renewer* say, for it is without doubt the most appropriate hair dressing that can be used, and an indispensable article for the toilet table. When using this preparation you require neither oil nor pomatum, and from the balsamic properties it contains, it strengthens the growth of the hair, removes all dandruff and leaves the scalp clean and healthy. It can be had at the Medical Hall and from all chemists in large bottles 50 cents each. DEVINS & BOITON, Druggists, Montreal, have been appointed sole agents for Canada.