

The Canadian Patent Office

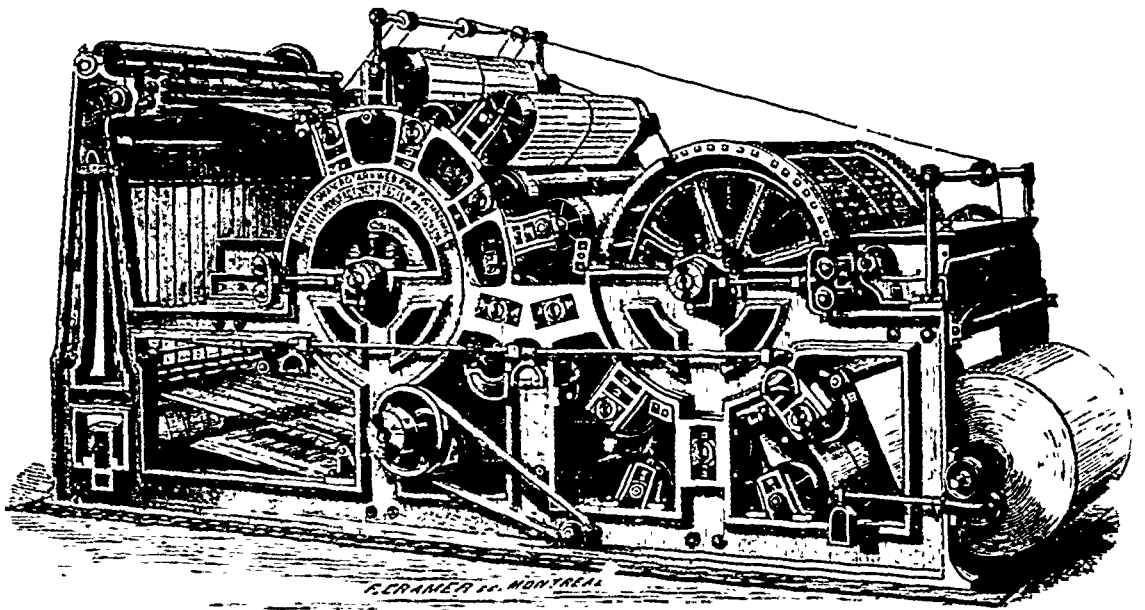
RECORD

MERCHANES MAGAZINE

Vol. 3.—No. 4.

APRIL, 1873.

Price in Canada \$2.00 per An.
United States - \$2 50 "



THE PRESTONIAN WEB PERFECTING PRINTING PRESS.

This press, of which we give an illustration above, is one of the favourite new fast presses which have been called into existence by the rapidly increasing circulation of modern daily journals. The Prestonian differs from other web printing presses in the fact that it is capable of printing not only from stereotype plates but also from movable type. This press has been introduced into Canada by the proprietors of the *Montreal Evening Star*, and is used in printing their daily editions. As may be seen from the illustration, the press contains two large cylinders on the interior of which are the type forms. In contact with the first type cylinder and immediately below it is the first impression cylinder, clad with thin blanketing, with the roll of paper to be printed fixed in close proximity. The almost endless sheet of paper, extending $3\frac{1}{2}$ miles in length, is carried round this im-

pression cylinder, and, as the machine rotates, the type, standing a little higher than the rest of the cylinder, imparts its first impression here. The sheet then passes round an adjacent cylinder called a carrier cylinder, and returns to the second impression cylinder, and is printed a second time on that part of the sheet immediately preceding the first impression. The same process follows with the third and fourth cylinders. It will thus be seen that in one revolution of the first type cylinder four impressions on one long, continuous sheet have been produced, and so long as this cylinder revolved an undivided length of paper printed on one side only would be produced; but it will at once occur to the reader that the same mechanical arrangement of cylinder and type that produced a succession of impressions on one side of the paper will be capable of doing it on the other. The sheet is now conducted to the second type cylinder, where, revolving over a succession of impression cylinders and carrier cylinders, identical with the arrangements already described in the first