

fits the other. By touching a handle, the mould and frame rose on end, disclosing a big iron mouth at the top. From a tank of molten metal close by came two men bearing between them a ladle with adjustable handles, by which they easily tipped the hot metal down the throat of the monster. In less than five minutes the mould was lowered and the stereotype removed and passed on to a cylinder-shaped machine, where all superfluous length was cut off. It was next laid on its back and the inside shaved, so that each plate would be exactly type high. From this machine it went on the trimmer, where, with sharp instruments, like chisels, any possible defects were smoothed off, and it was ready to be carried to the waiting press below.

In one corner of the room is a vat divided into two sections. In one of these the stereotype sheets are steamed and in the other the paste is made. It seems that the making of this paste is almost as profound a mystery as Masonry, and quite as jealously guarded, as on the paste the durability of the matrix depends.

The great fifteen-ton combination Hoe press occupies spacious quarters on the ground floor. It prints a four, six, or eight-page paper at the rate of 20,000 per hour, and a ten, twelve, or sixteen-page paper at the rate of 10,000 per hour. Your first impression is of a huge roll of white paper spinning slowly round, a massive iron framework, many polished bars, cylinders and inky rollers, in rapid motion, and at the other end the newspaper neatly folded, and it seems impossible to see how the trick is done.

Closer observation reveals the fact that there are three distinct machines working in perfect unison—two complete presses and a folding machine. The presses stand at right angles to each other, and each can be worked entirely independent of the other, if so desired. On each press are four cylinders, two of which are covered with blankets of fine, thick, white felt, and two for stereotype plates. These latter cylinders, when filled, represent eight pages of a paper, four pages to a cylinder. The paper from the great blank roll at the rear of the press, passes between the blanketed cylinders and those covered with the stereotype plates and thus the impression of the stereotype is conveyed to the blank paper, the back cylinder printing the paper on the upper side and the front cylinder on the lower. From these cylinders it passes over an angle bar and down to the folder. On each end of the presses are the ink fountains, at the top at one end and at the bottom at the other, and from these fountains 28 composition rollers carry the ink and apply it to the stereotype plates.

For printing a ten-page paper a half roll of paper only is run on one press and but two stereotype plates instead of four on the cylinder. For ten and twelve pages the second press is run at half speed, the paper passing between the cylinders with just sufficient rapidity to meet the eight pages from the other press at the point above the folder where the inserts are made.

More wonderful than the presses even is the folding machine. As each paper is collected and cut off it slips over a great triangular plate of steel, across the surface of which a number of inch-wide tapes are running. These tapes press the wide sheet over the edges of the triangle, and as it passes over the apex it receives its first fold. It

passes down out of sight and the next second it is dropped by curved fingers on the "carrier folder." It is now half size. As you watch this carrier and see every twenty-fifth paper shot an inch beyond its fellows by the automatic counter, someone presses a button or turns a handle and behold the papers come out on the "mail carrier" on the opposite side of the machine folded quarto.

The movement is so perfect and jarless that it seems impossible to shake off the idea that some great human brain is at work in the machine, and so in truth it is, if not in actual presence in results, in long years of patient thinking, planning and finally executing.

Winnipeg, Sept. 15.

E. C. H.

HON. J. V. ELLIS, LL.D.

JOHN VALENTINE ELLIS, of The St. John Globe, the new Senator, the son of Michael and Margaret Ellis, both natives of Ireland, was born at Halifax, N.S., in 1835. After a common school education he entered a publisher's house and learned the printing business. In 1854 he went to Montreal and three years later came to St. John. In December, 1861, Mr. Ellis and Christopher Armstrong purchased The Daily Evening Globe from Ross Woodrow, who had started the paper in 1858. Mr. Armstrong came from Ireland when very young and learned the printing trade in the office of The Morning News, the first penny paper in the British Empire. Its founder was George E. Fenety, who became Queen's printer for New Brunswick in 1853. Mr. Ellis was a reporter and editorial writer on The News and other papers in those days. Ellis and Armstrong were both printers as well as writers, and under their management The Globe was a success. In 1871 they purchased and moved into a spacious building on Prince William street, that went down in the general conflagration of June, 1877.

In 1882 Mr. Ellis was elected to the Provincial House of Assembly, and was re-elected in 1886, but resigned his seat in 1887 to run as Liberal candidate for St. John city for the Canadian Commons. He won the seat, but was beaten when he offered for re-election in 1891. Five years later he was once more successful.

Mr. Ellis was Postmaster of St. John for some years, and has been an active figure in the educational and philanthropic life of St. John. In 1897 he received the honorary degree of LL.D. from the New Brunswick University. In 1864 he married Mary Caroline, daughter of the late Samuel Babbitt, of Fredericton. Morgan's Canadian Men and Women of the Times, edition of 1898, says: "Mrs. Ellis is much interested in all that pertains to the good of humanity, and her active cooperation in good works, as well as her marked ability, was the cause of her election not long since as V. P. of the Local Council of Women of St. John."

D. G. Smith, of The Chatham, N.B., Advocate, is the new secretary of the Maritime Board of Trade.

The death occurred in Toronto, on September 9, of Emily Clements, wife of Charles N. Pirie, of The Toronto News, and the bereaved husband has much sympathy.