

### Printing the Paper

From the Old Ramage Press to Lightning-Speed Hoe—Fifty Years of Progress

FROM the old Ramage hand press, on which two men could print perhaps 100 four-page papers an hour, without folding, to the modern Hoe, that will turn off 24,000 12-page papers each hour, all pasted, folded and counted, is a long advance in newspaper printing, but it has been taken by The Oregonian in its first

ments in the printing press, and is still unexcelled except upon the point of capacity. This press will print 24,000 4-, 8-, 10-, 12- or 16-page papers, or half as many 18-, 20- or 24-page papers an hour, but The Oregonian demands a machine of greater capacity.

The machine that is to be installed the coming Spring, a Hoe quadruple news-

department of the paper has steadily grown and now occupies an important place in the economy of the institution. Even in the 19 years there has been considerable development in the field of newspaper art. Much of this is purely mechanical; that is, the improvement in mechanical agencies has made it possible to put creditable illustrations in the newspapers. Ten years ago nobody thought of making half-tone pictures for printing in newspapers, much less papers printed on rapid presses with the grade of ink necessarily used there. Now it is common. Coarse screens, deep stitching, careful stereotyping and skilful presswork are required after the artist has done his best in making the drawing. With line pictures, pen and ink drawings, which were the first form of modern newspaper illustration, the chances for failure after leaving the artist's hand

was no telegraphic connection with the outside world, and the only outside news obtained was by steamer from San Francisco. When a wire was at last extended to Portland, news came through in brief form and had to be largely rewritten. There were no typewriters in those days, and compositors had to struggle with handwriting that was frequently trying. Now the full Associated Press report comes by special leased wire direct to the editorial rooms of the paper, all typewritten and with scarcely a word or punctuation mark missing. In addition to this, special dispatches come by both telegraph lines—Western Union and Postal—and they are always typewritten. In the local department also most of the "copy" now turned in is typewritten. The telephone, and even the bicycle, have grown to be important agencies for getting the news, neither of which were

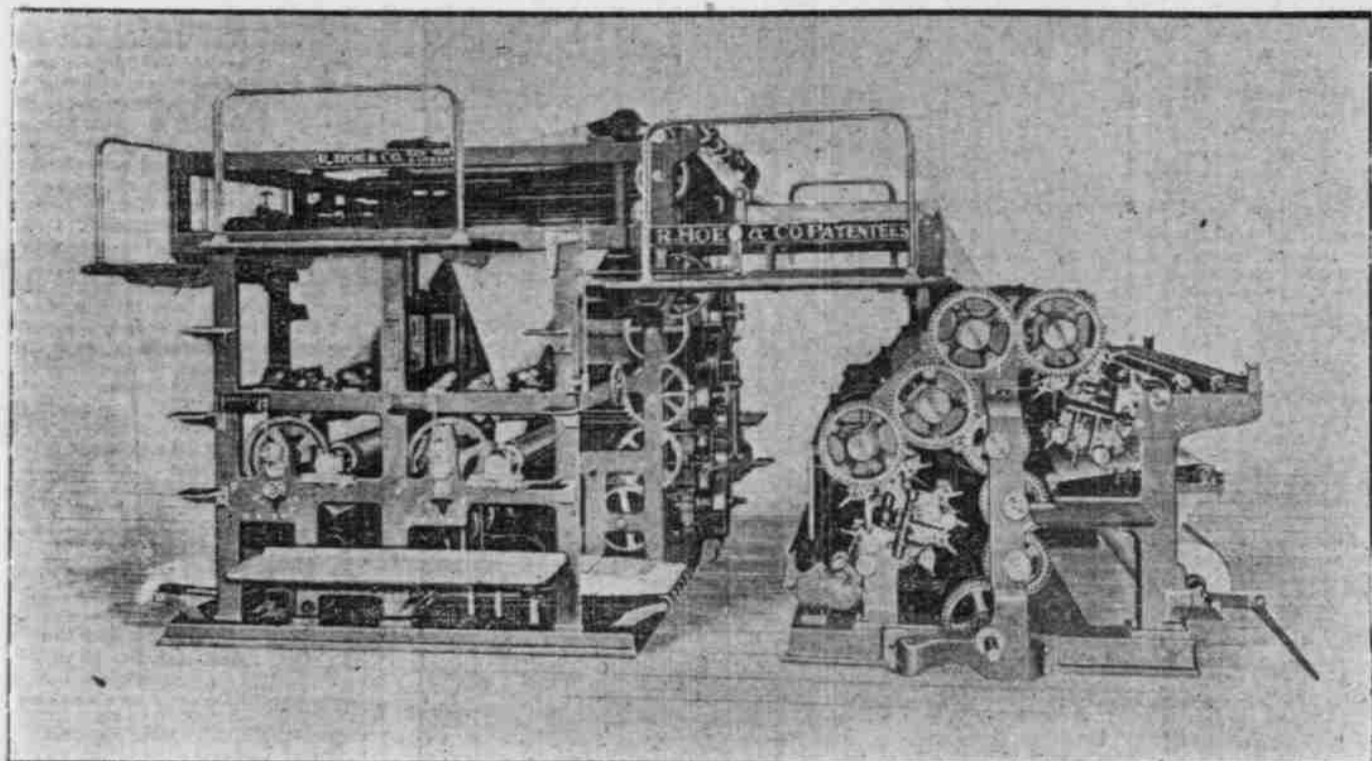
for casting a plate that will fit the press cylinder, with the type surface outward. The plates for all the pages of the paper are thus made on the ninth floor of The Oregonian building, and then lowered by a special elevator to the pressroom in the basement, clamped on the press in a moment, and then the big machine is set humming, and perfect newspapers, folded and counted, are delivered at the end of the press at the rate of 400 a minute. A large truck takes the papers to the mailing-room, where they are addressed by machines and are wrapped and put in mail sacks to be hustled to the postoffice or early train. After the early mails are supplied, carriers go out with papers for the city subscribers, and finish their deliveries before breakfast. Rapidly marks every stage of the work, and the result is that the details of the battle that took place yesterday on the other side of the

### Half a Century Ago

Henry Hill's Reminiscences About Pioneer Printers—Carriers' Addresses

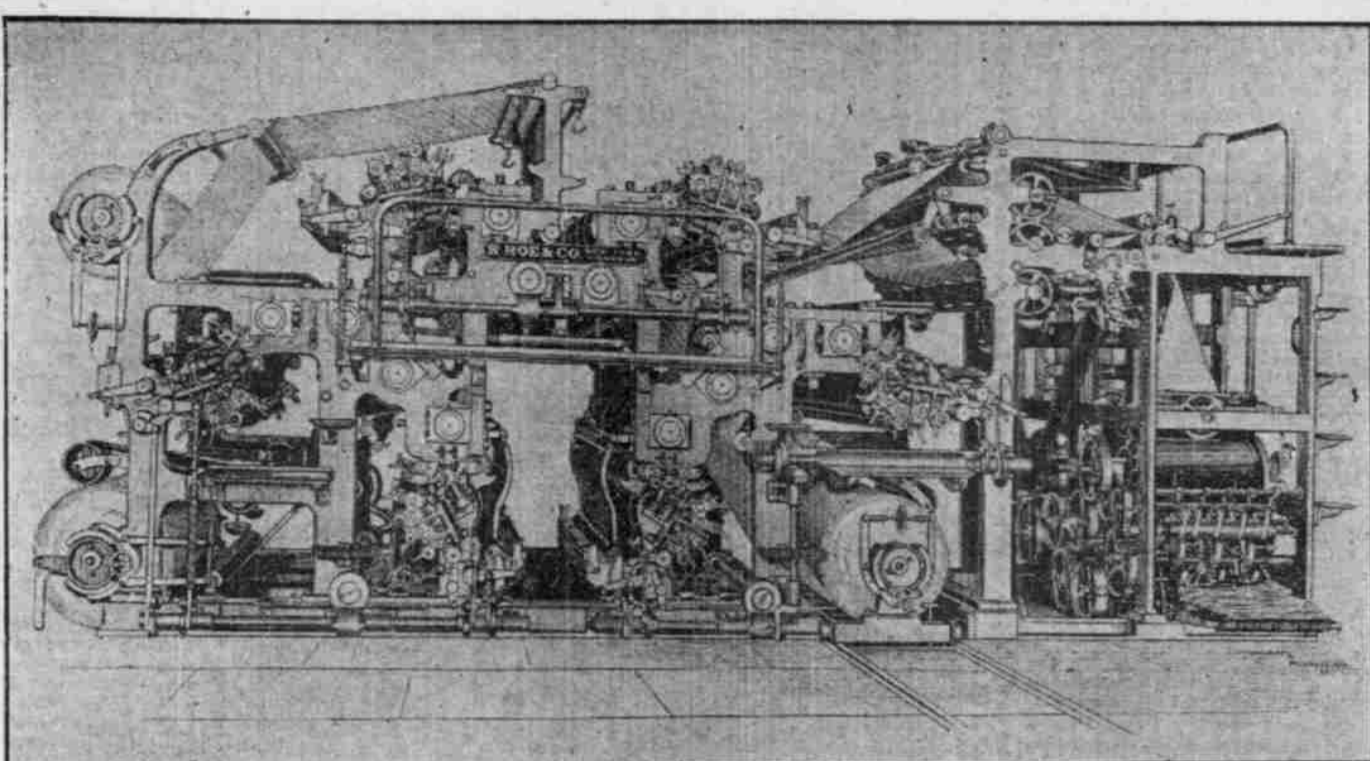
ALTHOUGH much has been said and written by early "historians" and "pioneer" paragraphers as regards the early days of Oregon and The Oregonian, some for a desire of appearing in print, others with the laudable purpose of keeping the past as near the present as early chronicling of events will permit, it may not become amiss

forms for the inside made up, locked up and put to press. It was Friday night, December 1. Many of the leading men of the village had been invited by Mr. Dryer to be present at the christening, and the room was filled. I remember how proudly I filled the position of roller boy on that occasion, and the modest operandi of getting the first impression. A the guests, they being ignorant of the



THE OREGONIAN'S NEW QUADRUPLE PERFECTING HOE PRESS.

This machine delivers papers folded, counted and pasted. It has a running speed of 48,000 4-, 6- or 8-page papers per hour; 24,000 10-, 12-, 14- or 16-page papers per hour; 12,000 20- or 24-page papers per hour. It will be installed in The Oregonian pressroom in the Spring of 1901.

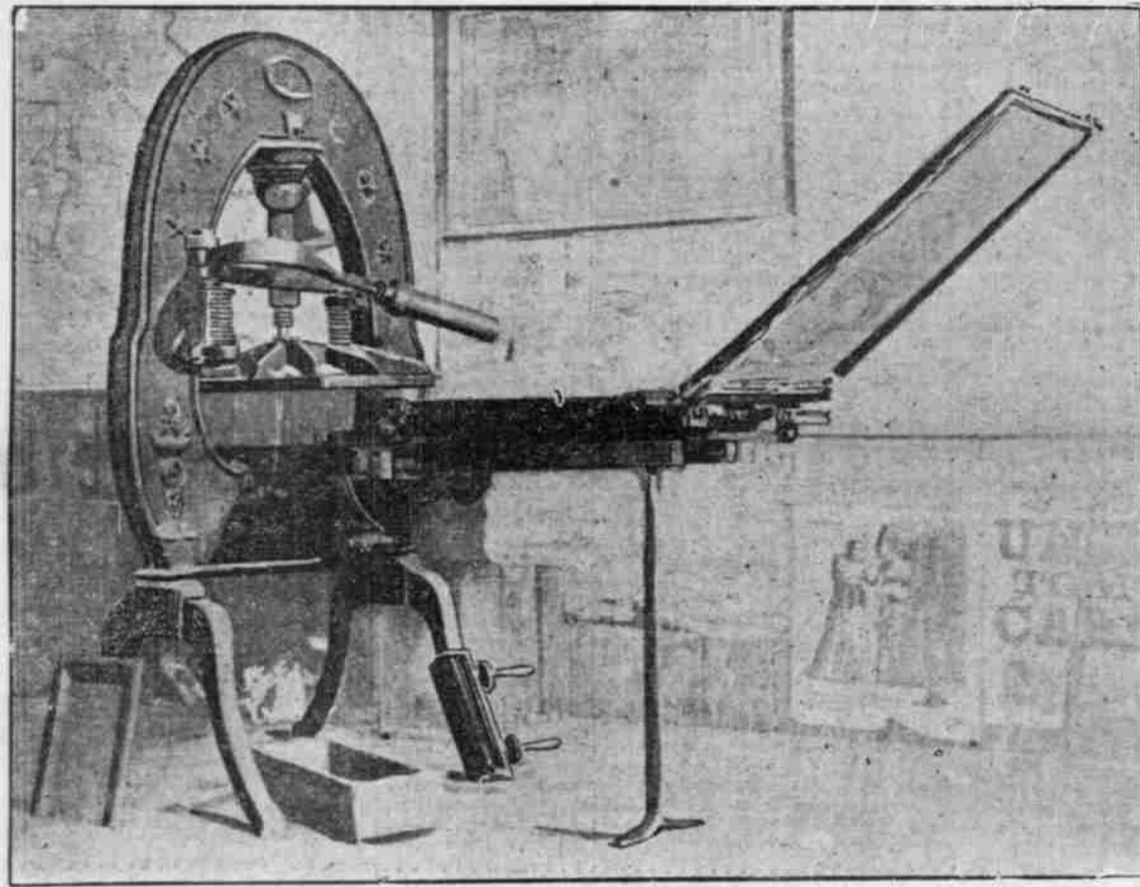


THE OREGONIAN'S NEW THREE-ROLL SEXTUPLE PERFECTING HOE PRESS.

This machine prints and delivers folded 72,000 8-page papers per hour; 48,000 10- or 12-page papers per hour; 30,000 16-page papers per hour; or 24,000 14-, 20- or 24-page papers per hour. It will be installed in The Oregonian pressroom after the new quadruple perfecting Hoe press is in position.

half century. Indeed, this modern fast press was installed before the paper was 42 years old, and it is now outgrown and new presses have been ordered to take its place. One of these will print, paste, fold and count 24,000 16-page papers an hour, and it will be installed for operation next April. The other will turn off 48,000 12-page papers an hour, and it will be put in operation somewhat later. The Ramage press on which the first copy of The Oregonian was printed was soon outgrown. It was taken to Olympia, where the first paper in the territory of Washington, the Pioneer, was printed upon it. A Washington hand press, which was regarded as very modern for this country, took its place in The Oregonian office. This "machine" had a capacity about double that of the Ramage it displaced. It served until 1852, when it went to print the first paper in Idaho, and the first of the series of Hoe presses that have since printed The Oregonian was installed. The old drum-cylinder Hoe was the first steam-power press north of San Francisco, though steam power was not applied to it until it had been printing The Oregonian about two years. An enormous amount of presswork was done on this machine, which was the only available press for the job work and the papers printed in Portland for several years. The state printing was done on it when Mr. Pittock was state printer. "Patents" or ready prints for the country papers of the Northwest were also issued from The Oregonian press in those years. In 1856 the Herald was established, and it brought an old Railway press, but that was never used for any purpose other than to print the Herald. The Oregonian press had a bed 6x12 inches, and it could print 3000 sheets an hour. For years it was worked to its full capacity 14 to 16 hours every day.

paper perfecting press, will be capable of turning off twice as many papers per hour as the present machine up to eight pages, and it will print as many 16-page papers as the present press will of papers of 12 pages. The one contracted for later delivery is a Hoe sextuple newspaper perfecting press capable of turning off per hour 72,000 papers up to 8 pages each, 48,000 up to 12 pages, 30,000 of 16 pages, and 24,000 up to 24 pages. It will print from three rolls or webs of paper at the same time, and will have an attachment for printing in colors. Both the new presses will be driven by electric power by direct connection, the motors being built in the machines. These presses represent the very latest development in printing machines, and with them The Oregonian will have unsurpassed facilities for turning out a modern newspaper. From Gutenberg to Mergenthaler the basis of the printing art remained practically without change. For four and a half centuries men set movable type by hand; then all at once came a revolution in the business and machines took the place of hand compositors, and a new basis of reckoning was established. An operator and a machine will do the work of five men, and do it better. The Oregonian kept its force and equipment in the composing-room up to the most modern standard always, but for many years that involved little except adding to the capacity. In 1894 the Mergenthaler Linotype machines were put in. Ten of these machines are now in operation in The Oregonian composing-room, and the entire body of the paper is set with them. A considerable part of the heading and display advertisements even is set with them. Various type faces are used, and changes may be made at any time. The



THE OREGONIAN'S FIRST PRESS.

In 1850 The Oregonian was printed on a Ramage press, capable of printing about 100 papers per hour. The primitive style of the machine is shown in the above illustration.

for me to try my hand in giving to your readers the trials and tribulations of the first "devil" that welded the broom, the "brir" and the "roller" at the advent of The Oregonian, December 4, 1850. It is somewhat of a task to think back in detail for a period of 50 years, and my data may not be up to chromometer correctness; yet I will endeavor to note down events that may come to my mind connected with my career and apprenticeship on The Oregonian, and the continuance of many years' service up to the advent of the Linotype, as carrier, "devil" and compositor. Fifty years ago! How well I remember being ushered into the august presence of the foreman, Mr. Berry, by Mr. Dryer, the editor and proprietor. In his gruff but good-natured way he remarked: "Here, Mr. Berry, is a boy for you. Put him to work. I think he will fill the bill and make a first-rate 'devil'." I was somewhat astonished at the remark as to the "devil" part, but it was not long before I found out its meaning in its fullest import. This being my first job on my own hook, I felt somewhat important. My first "official" act was the acceptance of a new broom, and by the foreman was given the injunction to sweep clean. This task being finished, I was taken into a small room in the rear of the composing-room and introduced to a large copper kettle, known by the pressman as the "composition kettle," with an order from my worthy boss to extract the glueose substance from the inner lining of said receptacle. I went to work with a will, and after about 10 hours scraping and polishing handed my work over as finished in good shape. I was then promoted to washing rollers, mixing ink, etc., winding up my initiation

name to be given to the first paper published in Portland. A sheet was carefully laid upon the form, the foreman taking the impression, when the guests each took hold of the paper by the edge and carefully lifted it from the types. At this juncture Mr. Dryer proclaimed the name, "The Oregonian," amid cheers and congratulations. Those participating as I remember, were: Messrs. Daniel H. Lowndale, W. W. Chapman, Stephen Coffin (the proprietors of the townsite), Amel P. Dennison, A. P. Ankeny, W. W. Baker, J. Terwilliger, Thomas and James Stephens, Job McNamee, Benjamin Allen, T. J. Dryer, Mr. Berry, and others whom I cannot bring to mind at present. W. W. Baker and the writer are, I think, the only two now living of the party assembled at the christening on that memorable night. The office was afterward moved to the northeast corner of First and Morrison, the present location of the Occidental Hotel. There it was that the plant was enlarged and an additional force of printers added. Wages at that time were \$25 per week. There are those yet in Portland who will remember that force of jolly good fellows, most of whom have joined the silent majority. W. A. Daly arrived about this time, first mate of a vessel from Honolulu. He was a practical printer, and soon took a situation on The Oregonian, where he worked for a number of years. John Riley, Daniel Lindsey, Edward Sheffield, George Lee and E. T. Gunn were among printers who were at various times employed in the office. H. L. Pittock became foreman of the office, in course of a few years, and were it not for his well-known aversion to appearing in public print, I could and would chronicle many incidents in his administration of affairs that made the "boys" happy as matters were in a somewhat muddled condition when he took charge. To my own knowledge, it was a continuous struggle during the '50s and '60s. The carrier boy's experience in the early days of Portland was varied, and considerable hardship and fatigue was gone through, as he was always loaded with from 100 to 150 copies on each of his trips, going first north from Morrison and then south to the southern limit. The streets, if such they could be called, were in a primitive state—no sidewalks, and some not even graded. In fact, they were merely in as bad condition as some of them at the present day. In those days the carrier looked forward with great expectations and pleasure when his "carrier's address" was to appear, generally New Year's day, whereby he was kindly remembered and remunerated by his patrons, some giving liberally, other scantily; but all in all, it was obeying to the faithful carrier. One gentleman, I remember with kindly feelings, gave me \$5 for a copy of my first address, and his next-door neighbor gave me \$25 very reluctantly, with the admonition that he wished after this I would "get his paper to him by \$ A. M., as he desired to be at his store by 7." Comment is unnecessary, as he doesn't need the paper now. T. J. Dryer wrote my first address, Sylvester Pennoyer my second, and my good friend and fellow-craftsman, Ed Sheffield, my third. The latter, I learn, is now practicing law in some of the Eastern cities. The practice of giving carrier boys a New Year's address has seemingly long gone out of date, being supplanted by monster New Year editions, whereby all concerned are benefited by large sales, and a corresponding large per cent to the carrier. A few months after the establishment of The Oregonian—I cannot state as to the exact time—there came upon the field seeking patronage and support a newspaper plant, editor, proprietors and printers, the Star, which had made a start at Milwaukie, Clatsop County. The above town was considered then the future metropolis, being at that time thought to be at the head of navigation. This paper was edited by John Orris Waterman, a Vermontor, but nevertheless a Democrat of the Jeffersonian-demiplicity stripe. The proprietors were W. D. Carter and R. D. Austin. They located their office on First street, between Stark and Washington, afterward on Washington between First and Second. Mr. Dryer was an earnest and forcible writer, and it may be truthfully said, fought for that which he thought was right and just, at great odds against him, during the territorial days of Oregon. There are those alive today that remember him as the "war-horse" in the Republican ranks, with his orator of destruction against anything Democratic. C. H. HILL.

About the year 1864 the Buckley folding machine was invented down in Vermont, and before the patent was a year old one of the new folders was at work in The Oregonian shop, years before a newspaper folder was used in San Francisco. This was a great strike for The Oregonian, for it soon had strong competition in this field. The Daily Union, a co-operative concern, for a time threatened the supremacy of The Oregonian, but the ability of The Oregonian to get its edition out in advance of its competitor proved of great value and the other paper fell behind in the struggle. There were early mails to catch in those days, and The Oregonian, by reason of its superior facilities, was always in time for the mails, while the others were frequently left. This folder was an important agent in the success of the paper then. One of Hoe's largest single small-cylinder two-revolution presses was added to The Oregonian's printing facilities in 1871. This machine printed sheets 49x9 inches at the rate of 1500 an hour. The paper was "worked and turned"; that is, it had to be run through the press twice before a complete paper was produced, but at the latter impression two complete papers were turned out. Both these presses were soon crowded with work, and in 1870 a Hoe double-cylinder mammoth press, the largest press made to feed by hand, was put in. In order to make room for this machine, the old drum cylinder was sold, and it went to Hillsboro, where it is still doing good work for the Independent. The new Hoe printed 3000 papers an hour, and it enabled The Oregonian to make a great stride forward. In less than four years, however, its limit was reached, and in 1874 it was superseded by a Hoe web rotary press, which printed from type placed on "turtles" making a segment of the cylinder. This was the first web, or continuous sheet, printing press installed north of San Francisco. Type was used on this press until about the year 1888, when the first stereotype foundry in the Northwest was introduced in The Oregonian shop and the "turtles" were adjusted to take the stereotype plates instead of the type forms. When this press came into use, the old separate folder was laid aside, the new machine being complete with folder attachment and capable of turning off 12,000 papers an hour. The double-cylinder press was added to Seattle, where it printed the Post-Intelligencer until its destruction in the big fire of 1889. The next press to serve The Oregonian was the one that is still printing the paper, a Hoe double-supplement perfecting press that was installed in December, 1881. It represented the latest develop-

ment of the printing art, and is still unexcelled except upon the point of capacity. This press will print 24,000 4-, 8-, 10-, 12- or 16-page papers, or half as many 18-, 20- or 24-page papers an hour, but The Oregonian demands a machine of greater capacity. The machine that is to be installed the coming Spring, a Hoe quadruple news-



COMPOSITOR AT HIS CASE.

Setting type by hand has been superseded in the modern composing-room by machines. The old-time compositor, shown in the above illustration, has given way before the advance of improved machinery.

dream of when the first number of The Oregonian was issued. The mechanical agencies for collecting and distributing the news have been so wonderfully perfected in the half century The Oregonian has been published that it is a matter of minutes now where it formerly was a matter of weeks. A battle takes place in Africa or China and the news comes ticking into the newspaper office, is written out on a typewriter, goes through the hands of the telegraph editor, who sees that it reads straight, writes a heading and sends it to the composing-room. The foreman cuts the ac-



C. H. Hill, Early Oregonian "Devil" and Compositor.

count into "takes" of convenient length and numbers them, and compositors each take a "take" and set the matter at the machines. A galley boy takes proofs of the matter, and these go to the proof-readers, who mark any errors that may have been made in setting. The proofs then go to the men who set the matter, and they set corrected lines, which are then put in place of the faulty ones. Then the matter goes to the imposing stone, where the forms, or pages, are made up, and the battle news, being important, is put on the first page with a big heading over it. In the meantime an artist has drawn a portrait of the leading General or map of the battle-field, and it takes its place in the page. When the page is filled, it goes on a truck to the stereotyping-room, where an impression of it is taken in moist paper-mache, that is baked hard, and this serves as a mold



THE MODERN TYPESETTING MACHINE.

One man can, on a Mergenthaler Linotype, perform the labor of five compositors by the old hand process. Ten of these machines are running day and night in The Oregonian office.

globe are waiting for us at our door when we rise this morning. While one set of men was getting the telegraphic news into the paper, another set was attending to local news, and another set to advertisements, and so on with all the departments and elements of the newspaper. Perhaps in no other line of human endeavor has the progress of the past half century been more marked.

tory services by being sent to a first-class hotel near by after a "bucket of editorial." The office was at that time located in the second story of a building at the northwest corner of Front and Morrison streets. It was there that The Oregonian was born, and most vividly do I call to mind what a time was indulged in at the birth. The outside had been printed, and the