

The Street of By-and-Bye.

BY MRS. ABBY.

'By the street of 'By-and-bye' one arrives at the house of 'Never.'—[Old Saying.]

Oh, shun the spot, my youthful friends, I urge you to beware!
Beguiling is the pleasant way, and softly breathes the air;
Yet none have ever passed to scenes ennobling, great, and high,
Who once began to linger in the street of By-and-bye.

How varied are the images arising to my sight,
Of those who wished to shun the wrong, who loved and prized the right!
Yet from the silken bonds of sloth they vainly strove to fly,
Which held them gently prisoned in the street of By-and-bye.

A youth aspired to climb the height of learning's lofty hill;
What dimmed his bright intelligence—what quelled his earnest will?
Why did the object of his quest still mock his wistful eye?
Too long, alas! he tarried in the street of By-and-bye.

'My projects thrive,' the merchant said; 'when doubled is my store,
How freely shall my ready gold be showered among the poor!
Vast grew his wealth, yet strove he not the mourner's tear to dry;
He never journeyed onward from the street of By-and-bye!

'Forgive thy erring brother, he has wept and suffered long!
I said to one, who answered—'He hath done me grievous wrong;
Yet will I seek my brother, and forgive him, ere I die!'

Alas! Death shortly found him in the street of By-and-bye!

The wearied worldling mused upon lost and wasted days,
Resolved to turn hereafter from the error of his ways;
To lift his grovelling thoughts from earth, and fix them on the sky;
Why does he linger fondly in the street of By-and-bye?

Then shun the spot, my youthful friends; work on while yet you may;
Let not old age o'ertake you as you slothfully delay,
Lest you should gaze around you, and discover, with a sigh,
You have reached the house of 'Never' by the street of By-and-bye!

—[Ladies' Companion.]

Book-Making in the United States.

It is somewhat surprising to know that the number of houses now actually engaged in the publishing of books, not including periodicals, amounts to more than 300. About three-fourths of these are engaged in New York, Boston, Philadelphia, and Baltimore, the balance being divided between Cincinnati, Buffalo, Auburn, Louisville, Chicago, St. Louis, and a few other places.

There are more than three thousand booksellers who dispense the publications of these 300, besides six or seven thousand apothecaries, grocers, and hardware dealers, who connect literature with drugs, molasses, and nails.

The best printing in America is probably now done in Cambridge; the best cloth binding in Boston, and the best calf and morocco in New York and Philadelphia. In these two latter styles we are as yet a long distance from Hayday, the pride of London. His finish is supreme. There is nothing between it and perfection.

Books have multiplied to such an extent in our country that it takes 750 paper mills with 2,000 engines, in constant operation, to supply the printers, who work day and night, endeavoring to keep their engagements with publishers. These tireless mills produced 270,000,000 pounds of paper the past year, which immense supply was sold for about \$37,000,000.

A pound and a quarter of rags are required for a pound of paper, and 400,000,000 pounds were therefore consumed this way last year. The cost of manufacturing a twelve months' supply of paper for the United States aside from labor and rags is computed at \$49,900,000.

Some idea of the stock required to launch a popular work may be gathered from Messrs. Longman's Ledger. These gentlemen report that when 25,000 copies of Mr. Macaulay's two recent volumes went flying all abroad from Paternoster Row, no less than 5,000 reams of paper, 6 tons of pasteboard, and 7,000 yards of calico, were swallowed up.

Most of the large publishing houses now stereotype everything they intend to print. The electrotyping process is largely employed, and an experiment is now being made in Boston, of which we shall hear more at some future time, which, if successful, will decrease the expense of stereotyping about one-third.

We have lately heard that a machine is in use in New York for type-setting, and that the second volume of Mr. Irving's *Life of Washington* was prepared for press by its aid.

Four hundred years ago, a single book of gossiping fiction was sold before the palace gate, in the French capital, for fifteen hundred dollars. The same amount of matter contained in this expensive volume the Harpers now supply for twenty-five cents. Costly books, however, are not out of fashion, for we are all glad to know that seventeen

hundred subscribers have already been obtained for Professor Agassiz's splendid new enterprise.

The Harper establishment, the largest of our publishing houses, covers half an acre of ground. If old Mr. Caxton, who printed those stories of the Trojan war so long ago, could follow the ex-Mayor of New York in one of his morning rounds in Franklin Square, he would be, to say the least, a little surprised.

He would see in one room the floor loaded with a weight of 150 tons of presses. The electrotyping process would puzzle him somewhat; the drying and pressing process would startle him; the bustle would make his head ache; and the stock-room would finish him quite.

An edition of Harper's Monthly Magazine consists of 160,000 copies. Few persons have any idea how large a number this is applied to an edition of a book. It is computed that if these magazines were to rain down, and one man should attempt to pick them up like chips, it would take him a fortnight to pick up the copies of one single number, supposing him to pick up one every three seconds, and to work ten hours a day.

The rapidity with which books are now manufactured is almost incredible. A complete copy of one of Bulwer's novels, published across the water in three volumes, and reproduced here in one, was swept through the press in New York in 50 hours, and offered for sale smoking hot in the streets. The fabulous edifice proposed by a Yankee from Vermont no longer seems impossibility.

'Build the establishment according to my plan,' said he; 'drive a sheep in at one end and he shall immediately come out at the other, four quarters of a lamb, a felt hat, a leather apron, and a quarto Bible.'

The life of an extensive publisher is of necessity one of great labor, both of mind and body. He begins with author and ends only with the purchaser. Between these two worthies there lies a world of detail known only to the 'Trade.' Success to the useful craft!—[Boston Transcript.]

Valuation of the Union, by the Fremont Party.

The True American, a black republican organ in Erie county, Pennsylvania, in commenting upon a speech delivered at a democratic meeting, says—

"This twaddle about the 'Union' and its 'preservation' is too silly and sickening for any good effect. We think that the liberty of a single slave is worth more than all the Union God's universe can hold!"

Mr. Giddings has said—

"I look forward to the day when there shall be a servile insurrection in the south; when the black man, armed with British bayonets, and led on by British officers, shall assert his freedom, and wage a war of extermination against his master; when the torch of the incendiary shall light up the towns and cities of the south, and blot out the last vestige of slavery. And though I may not mock at their calamity, nor laugh when their fear cometh, yet I will hold it as the dawn of a political millennium."

Hear Rufus P. Spaulding, a member of the republican convention at Philadelphia:—

"In the case of the alternative being presented of the continuance of slavery or a dissolution of the Union, I am for dissolution, and I care not how soon it comes."

Hear Erastus Hopkins, another member of the same convention:—

"If peaceful means fail us, and we are driven to the last extremity, where ballots are useless, then we'll make bullets effective. (Tremendous applause.)"

Hear H. M. Addison, of the American Advertiser, a republican print:—

"I detest slavery, and say unhesitatingly that I am in favor of its abolition by some means, if it send all the party organizations in the Union, and the Union itself, to the devil."

Hear "J. S. P.," the Washington correspondent of the New York Tribune, the leading republican paper:—

"I have no doubt but that the free and slave states ought to separate."

Hear a republican clergyman of Poughkeepsie:—

"I pray daily that this accursed Union may be dissolved, even if blood have to be spilt."

Hear a republican petition to Congress, now being circulated:—

"We earnestly request Congress, at its present session, to take such initiatory measures for the speedy, peaceful and equitable dissolution of the existing Union, as the exigencies of the case may require."

Hear Horace Greeley, the most prominent republican editor in the country:—

"The Union is not worth supporting in connection with the south."

Hear Thomas Ford, a member of the free-soil Know Nothing convention at New York, and a supporter of Fremont:—

"The time has come when we must declare we love freedom better than the Union."

Hear Linus B. Comins, a republican member of the U. S. house of representatives from Massachusetts:—

"I am in favor (in certain contingencies) of drawing black lines around the constitution, and writing the word 'expunged' across its face."—[Boston Statesman, Aug. 22.]

GRAND SUSPENSION BRIDGE.—I have some doubt whether any part of the world can present the same combination of attractions to visitors as can this spot. The falls, as a wonder of nature, stand confessedly without a rival, and in art, it seems to me the suspension bridge must take the same place. No description in print has ever conveyed or ever can convey an adequate conception of this stupen-

dous work. It is one of the things, which like the falls, to be understood and appreciated must be seen. It was a most lovely moonlight midnight when the train in which I approached the falls crossed the bridge.

The effect of the uncertain light was of course to give in appearance an increased depth to the gorge, to render more indistinct and undefined the cables and threads upon which the bridge is supported and suspended, and correspondingly to increase the intense feeling, indeed anxiety I may say, which one must feel thus suspended with the ponderous train of cars on apparently uncertain support over such an awful gorge.

If the time ever should come when human calculation in this matter shall be proved at fault, and the bridge should give way under the immense loads which cross it, no soul and scarcely a fragment of the falling objects would ever again be visible to tell the tale. Daylight, however, while it in no wise diminished the interest of the work tended to dissipate all possible ground of fear. The immense strength of the structure was revealed. Four cables, each at least ten inches in diameter made of separate strands of wire, are its support. These cables are anchored on each side under immense abutments of stone, which can no more be moved than the Rocky Mountains. They pass over square towers at least 70 feet high standing on the brink of both banks. From these cables other smaller cables depend, upon which the bridge is suspended.

It is 822 feet in length between the two towers, width some 18 feet. But a single track crosses it, although bars are so laid as to accommodate the wide as well as narrow gauge. I stood on it when several trains crossed and could detect nothing more than the inevitable jar which a moving train occasions.

The track above the river is 245 feet, and I need hardly say, standing at that elevation on such a structure, the view is sublime. The falls are above it some two miles, but are visible.

I have visited the falls before, but never viewed them so closely and in so many favorable aspects and points, as on this visit, and was never before so impressed with their character. An attempt at description is useless. Human thought can scarcely grasp them, and language is not adapted to them. They are something to be felt, not to be talked about, and to be in anywise appreciated must be seen. —[Kenosha (Wis.) Tribune and Telegraph.]

THE TYPE-SETTING MACHINE.—recently patented by W. H. Mitchell, of Brooklyn, N. Y., has been more than a year in actual operation, in the printing office of John P. Trow, New York. It is operated by means of finger-keys, by which the letters are lifted singly from their cases or slides, where they are arranged in line, and dropped on endless belts, by which latter they are carried with great rapidity and in proper sequence to the point where they are set up, in long lines ready for justification. A girl, after a few months' practice, can set up type in this manner at the rate of 4,000 ems per hour, and a skilful compositor could doubtless, considerably exceed this amount.

The justification is afterwards done by hand in the usual way. The progress of the invention has hitherto been seriously impeded by the want of an efficient distributing apparatus, a defect which is now about to be supplied by the addition of an automatic distributor.

It is believed that these machines will afford what has hitherto remained a desideratum—viz: a practical mechanical aid in composing and distributing type. The price of this type-setting machine is seven hundred dollars.

We may here add, that, within the past few years, several machines have been invented for setting type, in England, France, Germany and Denmark, as well as in the United States; but most of these have proved to be failures. One of the more recently patented European machines, and which is now in practical operation in Paris, was invented by Mr. Sorensen, a Dane. This combines the composing and distributing apparatus in one machine, the latter—as we learn from the 'Newspaper Record,' just published by Messrs. Lay and Brother, of this city—being automatic, and placed uppermost. On touching the keys, the type are caused to fall from their cases in the composing part on the inner surface of an inverted hollow cone, through the lower end of which they pass, and are set in lines, to be 'justified' by hand.

We also learn from the 'Record,' that a distributing machine, invented by Mr. V. Beaumont, has also recently been exhibited in New York, and is about to be introduced into a printing office in that city; and, also, that yet other machines, for both purposes, are being patented, and will shortly make their appearance.—[Monthly Rainbow, July.]

FULLER'S COMPUTING TELEGRAPH.—We used to think it was a jest—the idea of a calculating machine; but we have seen it and its ingenious proprietor, Mr. Fuller. The rapidity and accuracy with which all business problems are solved is truly surprising. It needs only to be seen to be admired.

Although an American invention, it has been extensively sold in England, France, Germany and Holland. Upwards of thirty of the principal London bankers have it in use. It computes interest at every possible rate per cent., upon any sum of money, for any length of time, both at three hundred and sixty and three hundred and sixty-five days to the year, and has a most perfect time-telegraph to compute the number of days any note has to run. To work equations of payments, or average of accounts, is one of its conveniences.

Copies have been purchased in Washington by all the departments, for use in the public

offices, as well as by the principal bankers, merchants and mechanics. Less time is required to obtain an answer to any business question than to prepare the statement.

Full printed directions accompany the work. It is learned by one or two hours study and practice. It occupies a prominent place in the Crystal Palace.

In response to some questions yesterday, he stated in less time than the question could be prepared or the answer recorded, that the Rotunda of the Capitol, being 90 feet in diameter, would contain 2,830 persons, and allow each 2½ square feet, or 18 by 18 inches.

The Crystal Palace, he said being 1,851 feet long, and 400 wide, with an additional acre to the transept or centre, measures 18 acres, and would contain at the same rate 347,000 persons upon the ground.

The population of the globe, being estimated at 900,000,000, could stand upon forty square miles, or an area of six and 33-100 miles square.

The expense of the United States House of Representatives at \$8 per day, amounts to \$1,944. The salary of the President is \$68½ per day. The pensions of the late Queen Adelaide was £100,000 per annum, equal to \$1,325 per day.

The revenue of the United States for 1851, at 52 millions, is equal to \$1.65 cents per second.—[Washington Telegraph.]

SNOW HOUSES.—The winter habitations of the Esquimaux who visit Churchill are built of snow, and judging from one constructed by Augustus to-day, they are very comfortable dwellings. Having selected a spot on the river where the snow was about two feet deep, and sufficiently compact, he commenced by tracing out a circle twelve feet in diameter. The snow in the interior of the circle was next divided with a broad knife, having a long handle, into slabs three feet long, six inches thick and two deep, being the thickness of the layer of snow.

These slabs were tenacious enough to admit of being moved about without breaking or even losing the sharpness of their angles, and then had a slight degree of curvature corresponding with that of the circle from which they were cut. They were piled upon each other, exactly like courses of hewn stone, around the circle which was traced out, and care was taken to smooth the beds of the different courses with the knife, and to cut them so as to give the wall a slight inclination inwards.

The dome was closed somewhat suddenly and flatly, by cutting the upper slabs in a wedge form, instead of the more rectangular shape of those below. The roof was about eight feet high, and the last aperture was shut up by a small conical piece. The whole was built from within, and each slab was cut so that it retained its position without requiring support until another was placed beside it, the lightness of the slabs greatly facilitating the operation.

When the building was covered in, a little loose snow was thrown over it to close up every chink, and a low door was cut through the walls with the knife. A bed place was next formed, and neatly faced up with slabs of snow, which was then covered with a thin layer of fine branches, to prevent them being melted by the heat of the body.

At each end of the bed a pillow of snow was erected to place a lamp upon—and lastly, a porch was built before the door, and a piece of clear ice was placed in an aperture cut in the wall for a window.

The purity of the material of which the house was framed, the elegance of its construction, and the translucency of its walls, which transmitted a very pleasant light, gave it an appearance far superior to a marble building—and one might survey it with feelings somewhat akin to those produced by the contemplation of a Grecian temple raised by Phidias—both are temples of art, inimitable in their kinds.—[Franklin's Journey to the Polar Sea.]

IMPROVEMENTS IN MAKING STEEL.—It is said that there have been but two improvements in the art of making this indispensable material for a century past. The Albany Journal observes:

Mr. J. M. Heath discovered the effect of Carburet of Manganese, to improve the quality of poor steel. Recently an Austrian army officer, Capt. Achatius, has perfected a new process of manufacturing it which promises to revolutionize the business. His own Government, persuaded of the practicability of his method, has engaged in making it at some of the Imperial Iron Works.

In all cases it proved to be equal to, and in many superior, to the more costly Cast Steel of England. It is admitted to have a much higher degree of strength than steel made by any other method—a property that will go far to bring it into rapid and general favor. The process of manufacturing as witnessed by a citizen of Albany recently in Paris, and who is greatly interested in such operations, is thus described by him:

Pig iron of the best quality was melted in an ordinary cupola furnace and then poured into a large vessel of cold water and constantly stirred. This granulated the iron and formed it into particles about the size of coarse shot. These grains were dried to prevent oxydation. They were then put into a crucible and treated as blistered steel is treated at Sheffield to produce Cast Steel, excepting that very small proportions of the Oxide of Manganese and of pulverized Spathose Iron Ore, were added to the grains of Iron thrown into the crucible.

THE term 'volume' is from *volvo*, to roll, the earliest manuscripts being in the form of a scroll or roll.

Learn to be obedient—all saints.