

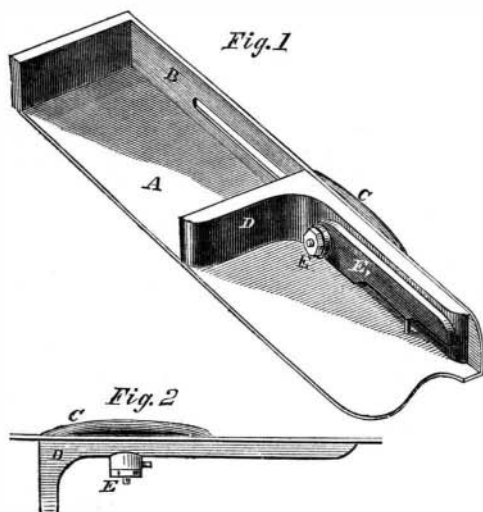
IMPROVED PRINTERS' COMPOSING STICK.



THE accompanying engraving represents an improvement in printers' composing sticks—the apparatus for organizing into rank and file those little leaden soldiers

which, in this civilized age, are the rulers of the world. It was invented by Stephen W. Brown, of Syracuse, N. Y., and is pronounced by the practical printers in our office a decided improvement; being very promptly adjusted to any width of column, and smooth and easy to the hand.

As will be seen by examining the cut, the slit for moving the slide is made in the side piece, B, of the stationary part, A, of the stick. Below the side piece, B, is the curved spring plate, C, to which is secured the small bolt that passes through the slit and through the slide, D, and has the nut, E, upon its end. Interposed between the slide and the nut is the lever, E', which has a projection upon its inner side, so arranged that when the lever is turned down (in the position shown), the projection forces the lever outward against the nut, and thus presses the slide firmly against the side piece, B,



of the stationary part of the stick. By turning the lever upward, the projection is carried away from contact with the side of the slide, by which the latter is relieved from its pressure, and may then be removed to any position to adapt it to the width of the column required.

It will be seen that this admits a very easy and prompt adjustment of the slide, and that there is no large screw-head in the way to interfere with the hand in holding the stick.

The patent covers a modification of the plan described, which consists in so hinging the lever as to have it turn at right angles to the motion here illustrated; the pressure then being exerted by a curved projection eccentric to the fulcrum pin.

The patent for this invention was procured (through the Scientific American Patent Agency), on May 22, 1860; and further information in relation to it may be obtained by addressing Joel McComber, at Watertown, N. Y.

RAINING SNAKES.

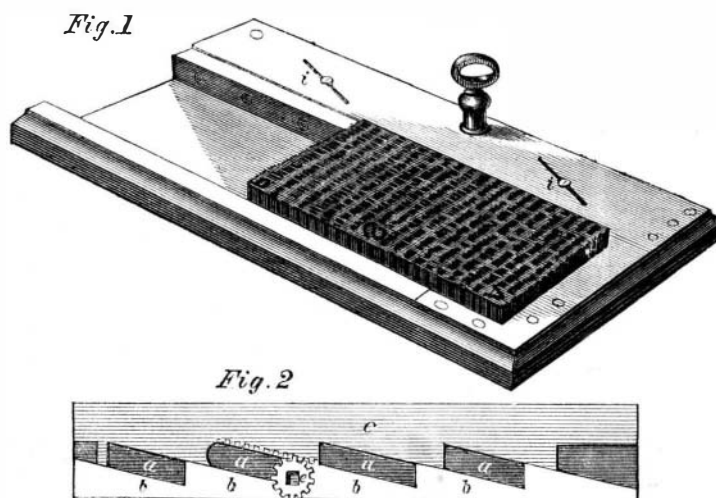
MESSRS. EDITORS:—During the very heavy shower of rain which fell here on the evening of July 3d, about sundown, while I was standing upon a flat rock, I heard a peculiar noise at my feet, and, on looking down, I saw a snake lying as if stunned by a fall from an immense height. On commencing an examination, the snake began to show signs of life, which I soon ended by a blow on the head. The animal was about a foot long, and of a gray color. I had previously heard of similar occurrences, but now, judging from ocular demonstration, I verily believe that his "snakeship" had never before seen South Granville, or, indeed, any other part of *terra-firma*. Will you or some of your correspondents suggest a plausible theory for this phenomenon?

WM. RUGGLES.

South Granville, N. Y., August 6, 1860.

IMPROVED PRINTERS' GALLEY.

In connection with the above-described composing stick, we present an illustration of an improved galley for holding type, by the same inventor. This also is considered in our office, especially by the foreman who has tried it, to be an improvement, rendering the wedging up of the type much easier and quicker than by the old method.



BROWN'S IMPROVED PRINTERS' GALLEY.

It is essentially an improved plan for forcing the movable ledge against the type and holding it there. In the movable stick, C, are cut a series of inclined notches, *a a a*, and a series of corresponding notches, *b b b*, are made in the stationary part of the apparatus, so that when the stick, C, is pushed along endwise, these notches operate as wedges to force it sideways against the type. This longitudinal motion is effected by turning the pinion, *e*, by means of a key, a rack being made along one of the notches as shown. For drawing the movable stick back when it is carried longitudinally in the opposite direction, the screws, *i i*, are inserted in its side and passed through the diagonal slits in the covering plate. The key is removable so as to be withdrawn when it is desired to take a "proof."

An application for a patent for this invention is now pending before the Patent Office, and further information in relation to it may be obtained by addressing Joel McComber, at Watertown, N. Y.

A PLAN FOR DRAWING CANAL BOATS BY LOCOMOTIVES.

MESSRS. EDITORS:—The idea of combining a railroad and a canal may be old and unsuccessfully tried, but as I am not aware of the fact, I venture this communication to your valuable and interesting paper.

I propose laying a track on the tow-paths of canals and pulling the boats by locomotive engines, which might be owned by the canal company, a certain number passing each way daily, on schedule time; the boats might be private property, paying increased tolls for motive power. Single boats could be picked-up or dropped by a train of passing boats, with the utmost ease and dispatch, and the number of boats that could be drawn by a single locomotive would be very great. Connections might be effected by attaching each boat to a cable or by coupling the boats together. The most profitable rate of speed for freight would have to be established by trial, though it would probably be considerably greater than the present; but passenger and quick freight boats for lighter and more valuable merchandise could be run as fast as the abrasion of the water on the banks would admit, which, of course, would depend on the width and depth of the channel.

Canals operated in the above-described way would be vastly increased in capacity for business, not only from greater quickness of transportation, but because boats consolidated into trains occupy less space and are less in each other's way; in other words, this plan of propulsion converts a promiscuous crowd into a well-disciplined army. The cost of the rail tracks would be small, in comparison to those of ordinary railroads, for grading is already done, and the lightest possible superstructures would last a long time where rates of speed were so low, and the rolling stock reduced to locomotives alone.

From the same causes current expenses and loss by casualties would be small. Grades would be composed of levels, with inclined planes at the locks; the engines performing the heavy draught of the former and passing up the latter with their own weight alone.

WM. W. BLACKFORD.

Saltville, Va., August 1, 1860.

[We suggested the adoption of this method of canal commerce on page 299, Vol. XIII. (old series) of the SCIENTIFIC AMERICAN, and we again commend it to public attention.—Eds.]

BLACK HAWK THE BEST ROADSTER.—At the agricultural show at St. Louis, Mo., last Fall, \$1,000 was offered as a premium for the best roadster stallion. The judges from the great number offered selected six which were deemed the best, and then made a critical examination of them to find the best one. Of these six, five were sons of "Black Hawk," and the sixth a grandson. "Stockbridge

Chief," bred in Massachusetts and now owned in Ohio, won the premium.—*American Stock Journal*.

THE "GREAT EASTERN" ON ANOTHER EXCURSION.—The day after the *Great Eastern* returned from Cape May, she started on another excursion to Annapolis, Md., where she is to take coal for her return trip to England. She is advertised to sail for Liverpool on the 16th inst. A very marked contrast was observed between the sailing of this marine monster on Thursday, the 2d inst., and Monday the 30th ult. On the second occasion there were no steamers to accompany her down the bay, no crowds on the roofs and house-tops to witness the mammoth steamer as she sailed down the river, with scarcely a hundred passengers on board.

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