

(No Model.)

E. HARRIS.
HAND PRINTING DEVICE.

No. 558,490.

Patented Apr. 21, 1896.

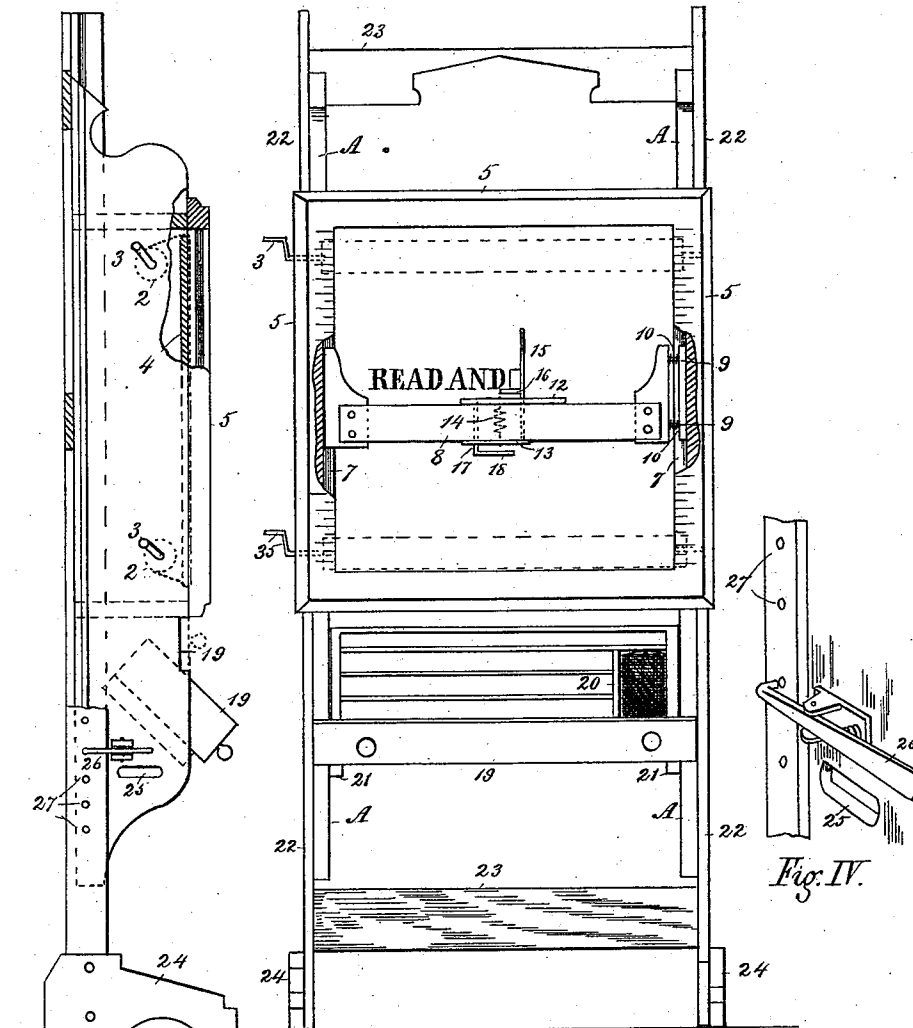
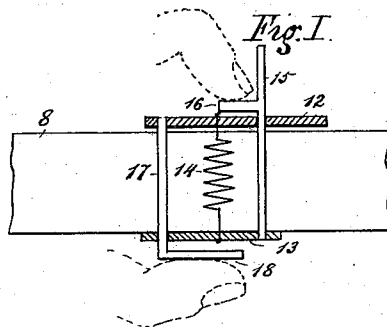


Fig. II.

Fig. I.

Fig. III.



Witnesses,
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UNITED STATES PATENT OFFICE.

EDWIN HARRIS, OF CHICAGO, ILLINOIS.

HAND PRINTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 558,490, dated April 21, 1896.

Application filed August 22, 1895. Serial No. 560,134. (No model.)

To all whom it may concern:

Be it known that I, EDWIN HARRIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Hand Printing Devices, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a front view, partly in section, of my improved hand printing device; Fig. 2, a side view, partly in section, and including a part of the stand on which the apparatus is vertically adjustable; Fig. 3, a detail view of the adjustable spacing-ruler and sliding gage, and Fig. 4 a detail of the spring-actuated dog by which the apparatus is adjusted on its supporting-stand.

The object of my invention is to provide a simple, attractive, and useful device whereby rubber printing-type may be utilized for the purpose of teaching spelling, reading, and composition to young people in their homes and pupils in schools. The tedium of other tasks or studies will thus be greatly relieved by interposing occasional exercises in orthography, &c., thereby combining stimulus and amusement with valuable instruction.

The apparatus will be found useful for other purposes. In establishments for the sale of general merchandise the employees may occupy their leisure moments to advantage by printing tags or cards to be attached to the various articles showing, their names, grades, and prices. Small circulars, special price-lists, &c., may also be economically and tastefully executed.

In the accompanying drawings, A represents the main frame of the device, having paper-rollers 2, provided with cranks 3, journaled in its sides. A flat board 4 is fitted in front of the main frame and serves as a table or platen for the paper as it passes from one roller to the other. A rectangular skeleton frame 5 is removably attached to the front of the main frame by hinges on one side and on the other by a hook and eye 6. Grooves 7 are formed in the side rails of the frame to admit a vertically-movable ruler or line-spacer 8.

In order to provide sufficient friction to prevent too free a movement of the ruler, its ends are provided with metal brackets, one of which

is divided vertically. The outer section is provided on its inner side with pins 9, which engage and slide in corresponding holes in the inner section. The said pins being encircled by spiral springs 10, it will be seen that the friction of the ruler in the groove may be regulated at will.

The body of the ruler is made of parallel strips of wood with an interval between them to admit the vertical limbs of a sliding gage, which is so arranged that the horizontal plates 12 and 13 are normally in contact with upper and lower edges of the ruler and are connected by a spiral spring 14. The vertical limb 15, having a ledge 16, passes downwardly through the plate 12, and its lower end is attached to the plate 13. The other vertical limb 17, having a horizontal extension 18, passes upwardly through the plate 13, and its upper end is attached to the plate 12. The purpose of this arrangement is to secure the required degree of friction between the gage and the ruler.

The operation of the device is as follows: The ruler and gage being adjusted in the desired position, a type is placed in the angle formed by the junction of the vertical limb 15 and the ledge 16 and pressed upon the paper. The thumb of the operator's left hand is then applied to the extension 18 and the forefinger of the same hand to the ledge 16. Being thus pressed together, both plates will be released from contact with the ruler, which may then be moved forward to the position for the succeeding letter or shifted back for another line of letters.

The side rails of the skeleton frame are provided with graduated scales to enable the operator to adjust the ruler in the proper position and to regulate the spaces between the lines.

A type-rack 19, provided with recesses and an inking-pad 20, is conveniently located below the platen and normally occupies the position shown by dotted lines in Fig. 2. When the device is in operation, the rack is partly withdrawn and rests upon cleats 21.

The apparatus may be conveniently and adjustably supported on a stand consisting of side stanchions 22, connected at proper intervals by cross-bars 23 and bolted at their lower ends to feet 24. The inner faces of the

stanchions are provided with grooves, which engage sliding tongues on the outer sides of the main frame A. Hand-holes 25 are formed in the sides of the said frame, and spring-actuated dogs 26 are arranged to engage apertures 27 in the stanchions.

What I claim as new is—

In a hand printing apparatus, the combination with the herein-described main frame provided in front with a platen and at the foot with an adjustable type-rack and having paper-carrying rollers journaled in its sides, of the skeleton frame hinged to the front of said main frame and provided with graduated scales; the spacing-ruler sliding within

grooves in the said skeleton frame and having a friction-regulating device; the type guide and gage provided with adjustable friction adapted to slide on the spacing-ruler and the adjustable supporting-frame, all constructed and arranged substantially as and for the purpose herein specified.

In testimony that I claim the foregoing I have hereunto set my hand, this 12th day of August, 1895, in the presence of witnesses.

EDWIN HARRIS.

Witnesses:

C. R. BARBER,
W. E. HOIT.