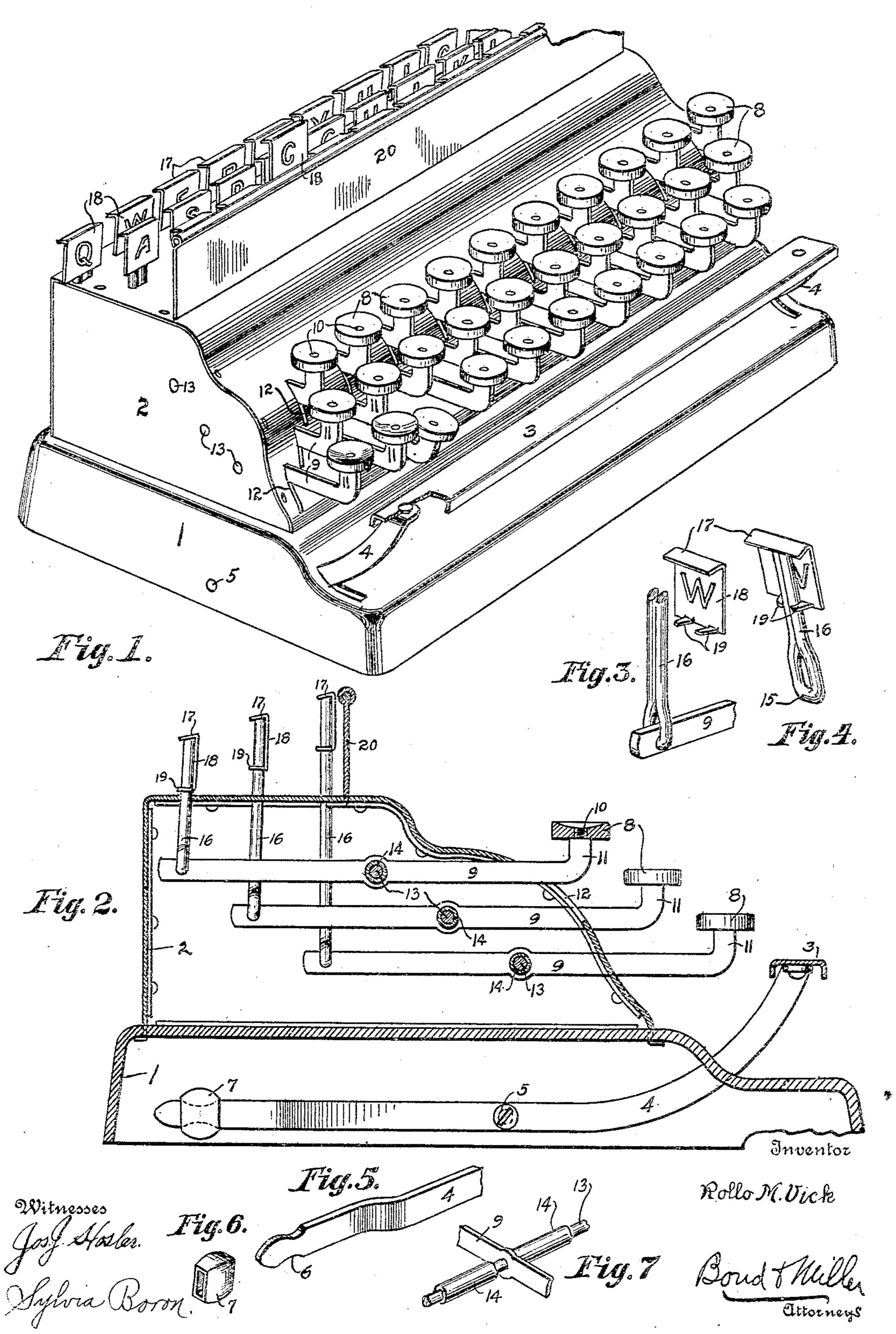
R. M. VICK.

EDUCATIONAL DEVICE.

APPLICATION FILED JAN. 5, 1909.

940,093.

Patented Nov. 16, 1909.



UNITED STATES PATENT OFFICE.

ROLLO M. VICK, OF ALLIANCE, OHIO.

EDUCATIONAL DEVICE.

940,093.

Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed January 5, 1909. Serial No. 470,833.

To all whom it may concern:

citizen of the United States, residing at Alliance, in the county of Stark and State 5 of Ohio, have invented a new and useful Educational Device, of which the following

is a specification.

My invention relates to improvements in devices to be used in acquiring skill in the 10 operation of key-actuated machines and is especially adapted to the teaching of the "touch method" in the art of typewriting; and the objects of my improvement are to produce a device of the character indicated 15 which may be cheaply constructed as well as efficient, thoroughly satisfactory, and well adapted to the purpose for which it is intended. These objects, together with other objects and advantages of my device, 20 will be readily apparent to those skilled in the art and the construction by which I attain these objects and advantages is illustrated in the accompanying drawing, in which—

25 Figure 1 is a perspective view of the device. Fig. 2 is a sectional view taken upon a transverse vertical plane. Fig. 3 is a view of a portion of one of the key bars, together with the letter bars and one of the letter 30 plates. Fig. 4 is a perspective view showing the letter plate attached to the letter bar. Fig. 5 is a detached view of a portion of the end of the spacing bar. Fig. 6 is a perspective view of the rubber buffer used 35 upon the spacing bar. Fig. 7 is a detached perspective view illustrating the pivotal

support for the key bars.

Throughout the several views similar numerals of reference indicate similar parts.

In the drawing is illustrated that form of the device to be used for teaching the art

of typewriting.

The numeral 1 indicates a base portion and the numeral 2 the upper portion of the 45 casing. The base portion and upper portion are preferably of a form identical with or similar to that shown in the drawing, the said portions being so formed as to simulate a typewriter of the usual construc-50 tion.

Arranged in front of the casing in exact imitation of the arrangement of the various keys of a typewriter is a series of keys as illustrated in the figures. The relative po-55 sition of each of the letter keys and the position of the spacing key is carefully ar-

I ranged in exact conformity with the ar-Be it known that I, Rollo M. Vick, a rangement of the typewriter key board. The spacing key 3 in Fig. 1 is broken away to illustrate the method of attachment of 60 said spacing key to the spacing bar 4. One of said bars is provided at each end of the spacing key and said bars are pivotally attached to their respective ends of the base portion 1 by means of the rivet or other 65 pivotal device 5. At the free ends of the spacing bars portions are cut away at the point 6, providing a suitable form or shape for the end of the spacing bar to retain the buffer 7. This buffer is formed of a piece 70 of rubber, preferably of the shape illustrated in Fig. 6, which is slipped over the end of the spacing bar and into engagement with the notched portion at the point 6. It will be understood that when the 75 spacing key 3 is pressed downward the free end of the spacing bars will be caused to rise and the buffer 7 will strike the top of the base of the casing, thus providing a means of producing a cushioned blow of the 80 spacing levers against said casing.

> The various keys, 8, are attached to their respective key bars 9 by any suitable mechanical means. I have illustrated the key bars 9 as being provided with an integral 85 screw threaded portion 10 and the keys 8 with corresponding screw threaded apertures, thus providing means for screwing the said keys into place upon the key bars. The key bars 9 are preferably of the form 90 shown, provided with a right angled portion 11 to which the keys are attached and the flattened main portion extending in a horizontal direction within the casing. The front of the upper portion of the casing is 95 provided with a series of appropriately arranged slots, 12, through which the key bars extend and which limit the key bars in their movements upon their pivotal connections. Running longitudinally from end to end of 100 the upper casing 2 are horizontally disposed bearing rods 13. These bearing rods are round, and suitable round apertures are arranged in the key bars. The key bars are disposed in proper series along the rods 13 105 with spacing sleeves, 14, upon the rods 13 between them, the appropriate pivotal attachment and spaced relation of the key bars being thus provided and maintained.

> At the end of each key bar inside the cas- 110 ing is arranged a round aperture, and within said aperture is located the yoke portion

15 of one of the letter bars, pivotal connection being thus provided between the key bars and the letter bars. The letter bars are preferably of the form shown in the 5 drawing and consist of pieces of wire provided with parallel adjacent portions 16 and the integral yoke portion 15 before mentioned. At the upper end of the parallel portions the bars are provided with beveled 10 ends, as illustrated in the drawing, said ends being adapted to engage the flanges 17 of the letter plates 18. Each letter plate is provided with integral spaced lugs 19 at its bottom edge, said lugs being adapted to be 15 bent slightly over and toward each other for the purpose of gripping the portion 16 of the letter bar. Each letter bar extends through an appropriate aperture in the top of the casing 2, said letter bars being so 20 arranged as to move freely up and down within said apertures and the said letter plates being attached at the ends of the letter bars above the top of the casing, as illustrated. The shield 20 is provided on the top 25 of the casing and in front of the letter plates to conceal the said letter plates from the operator except when the keys are pressed. Each of the keys is entirely blank, no letters appearing upon the same, but each of 30 the letter plates is provided with an easily read letter or symbol to correspond with the letter or symbol of its appropriate key, in accordance with the arrangement of a typewriter key board.

A device of the character described having been provided, the operation of the same is as follows. The operator assumes the same position with respect to the device as he would assume in the operation of a typewriter. By pressing the various keys downward the key bars may be moved upon their pivotal connections and the corresponding letter plates will thus be lifted above the shield 20, where they may be read by the

operator. In Fig. 1, one of the blank keys is shown depressed and the corresponding

letter plate "C" is illustrated as lifted above the shield 20. By practicing upon the device herein described the operator will readily acquire a knowledge of the exact loca-50 tion of the various keys corresponding to the letters desired and it will be seen that an extremely practical device is thus provided for the teaching of the "touch method" in typewriting or in the art of op-55 erating similar key-actuated mechanisms.

I claim:

1. In an educational device for acquiring skill on a key board, a casing, horizontally disposed key bars pivotally mounted in said 60 casing, vertically disposed letter bars pivotally connected to said key bars, letter plates attached to said letter bars, a shield for normally concealing said letter plates, blank keys attached to said key bars, the ar- 65 rangement of said keys being identical with the arrangement of the keys on the key board on which skill is to be acquired, and the arrangement of said letter plates with reference to said keys being such that when 70 the various keys are depressed the appropriate corresponding letter plates will be raised above said shield.

2. In a device of the character described, a casing, a series of key bars, a series of 75 blank keys, letter bars, letter plates, and a shield, the key bars pivotally mounted in the casing, the blank keys attached to one end of the various key bars, the letter bars pivotally connected to the opposite ends of 80 the key bars, the letter plates attached to the said letter bars, and the said shield adapted to normally conceal said letter

plates.

In testimony that I claim the above, I 85 have hereunto subscribed my name in the presence of two witnesses.

ROLLO M. VICK.

Witnesses:

T. H. Armstrong, Lena C. Buehler.