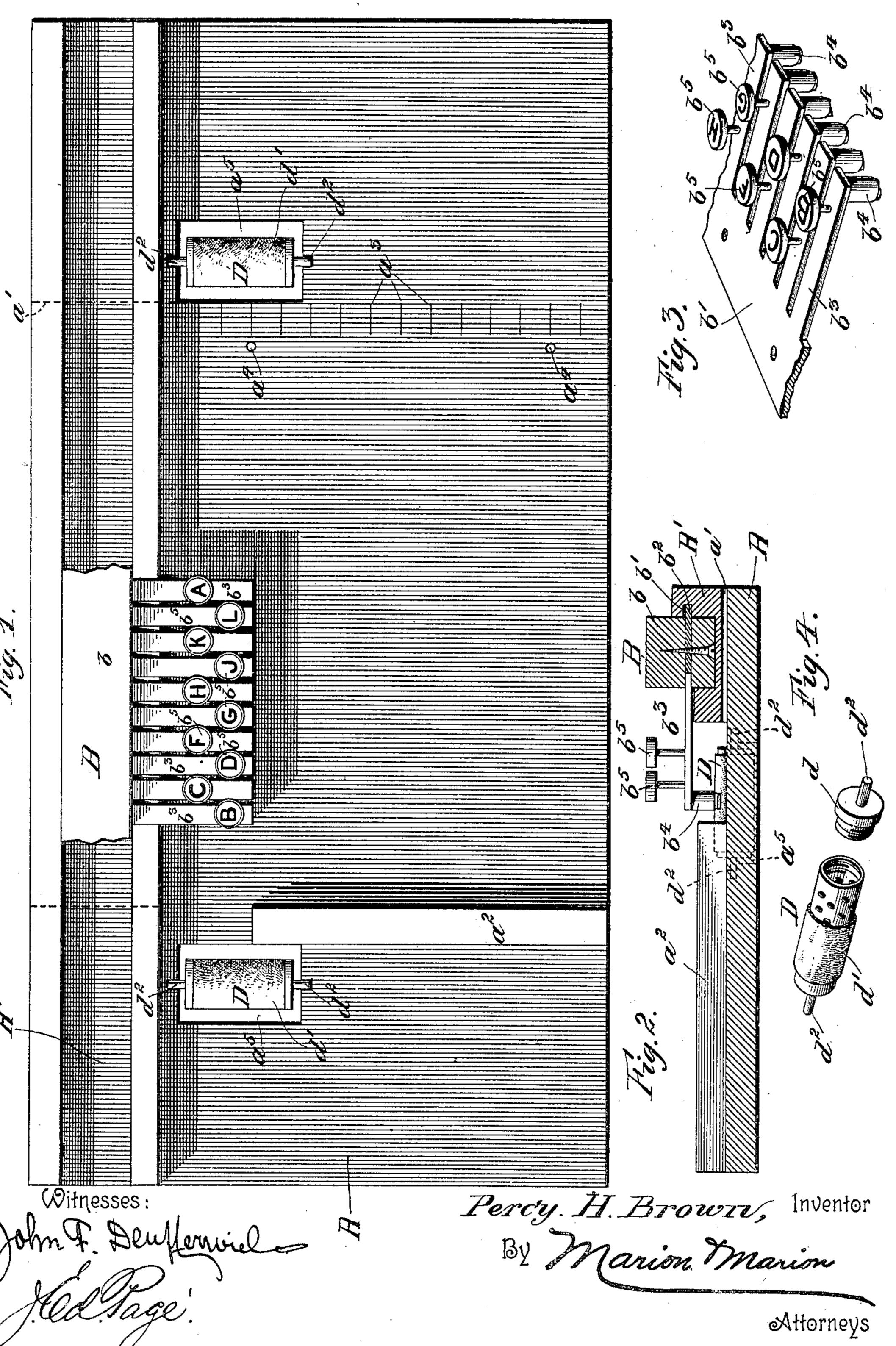
## P. H. BROWN. TYPE WRITER.

(Application filed Nov. 23, 1899.)

(No Model.)



## UNITED STATES PATENT OFFICE.

## PERCY HULL BROWN, OF VICTORIA, CANADA.

## TYPE-WRITER.

SPECIFICATION forming part of Letters Patent No. 661,304, dated November 6, 1900.

Application filed November 23, 1899. Serial No. 737,983. (No model.)

To all whom it may concern:

Be it known that I, PERCY HULL BROWN, a subject of Her Majesty the Queen of Great Britain, residing at Victoria, county of Victoria, Province of British Columbia, Canada, have invented certain new and useful Improvements in Type-Writers; and Idohereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in type-writers; and its object is to provide a type-writer which is simple in construction, of few parts, effective in operation, and which can be manufactured at a moderate cost.

To these ends the invention consists in a type-writer constructed substantially as herein illustrated and described, and defined in

20 the appended claim.

Referring to the drawings, in which similar letters of reference indicate similar parts, Figure 1 is a partial plan view, with parts broken away, of a type-writer constructed in 25 accordance with this invention. Fig. 2 is a vertical central section thereof. Fig. 3 is a view in perspective of a portion of the type-bar. Fig. 4 is a similar view of the ink-roller, the parts being separated to show the construction.

In the drawings, A represents the base or frame of a type-writer constructed in accordance with this invention and is preferably of wood and of a size and shape best suited for

35 the intended purpose.

Along the upper edge of the base A is formed a guideway A', which is preferably constructed of two parallel strips of wood, forming a recess between them in which is guided 40 the keyboard B. A recess a' is formed at the central portion of the guideway A', between it and the base A, for the passage of the pad or paper to be written upon. A guide-strip a<sup>2</sup> is secured upon the base A, at a suitable 45 point at one side of the recessa', against which the side of the pad or paper is pressed and guided. A series of parallel lines a3 is formed upon the face of the base A, adjacent to the other side of the recess a', which serve to in-50 dicate the spaces between the lines of writing on the pad or paper. If desired, a series of [

holes  $a^4$  may be formed in the base A at suitable points adjacent to the space-lines  $a^3$ , in which suitable pegs (not shown) are adapted to be inserted to hold the pad or paper in its 55 proper position.

At suitable points on the base A are formed recesses  $a^5$ , in which are journaled ink-rollers D, over which the types are adapted to be passed when necessary to ink them.

The keyboard B is constructed of a bar b, preferably of wood, which is slidably mounted in the guideway A' and is adapted to be retained therein by means of a metal plate b', working in a groove  $b^2$ , formed in one of the 65 parallel strips forming the guideway. A plurality of metal bars  $b^3$ , preferably of spring metal, are secured to the bar b and project over the base A. These bars  $b^3$  may be formed integral with the plate b' or separate there- 70 from, as desired. Upon the free end of each of the bars  $b^3$  is formed a downwardly-projecting  $\log b^4$ , upon the lower extremity of which is secured a type-plate having the desired letter or other symbol to be printed upon the 75 paper. Upon the upper side of each of the bars  $b^3$  is secured a suitable finger button or knob  $b^5$ , upon which is indicated the letter or symbol corresponding with the type carried by said bar.

The ink-rollers D are preferably formed of a hollow perforated cylinder having a removable cap d and covered with cloth d' or other suitable fabric. On the end of the cylinder and the cap is formed a lug or pin  $d^2$ , by 85 means of which the ink-rollers are journaled in suitable bearings formed in the recess  $a^5$ . The interior of the cylinder is filled with ink of any suitable kind and color, which saturates the covering d' through the perforations 90 of the cylinder, as will be readily understood.

The slidable bar b is movable only in a rectilinear path in the guideway afforded by the parallel rails on the base. The type-heads on the yieldable or spring fingers are all of 95 one case, preferably the upper case, and they are arranged on the fingers or bars  $b^3$  in one common plane longitudinally of the machine. The fingers are carried by the slidable bar to overhang the paper-platen afforded by the 100 graduated bed, and the type-heads on the fingers are adapted by the slidable movement

of the bar to frictionally brush or sweep across the inking-rollers, whereby the faces of the

type are inked.

The paper is slipped edgewise through the 5 slot a' in the bed until its edge rests against the guide-strip  $a^2$  and registers with one of the graduations  $a^3$  on the platen afforded by the bed. The slidable bar b is now shifted along the guideway until the proper key or 10 finger overhangs the place on the paper where the first impression is to be made, after which that particular finger or key  $b^3$  is depressed by pressure applied to the button  $b^5$ , and the first impression is thus made on the paper, 15 the finger or key returning by its inherent elasticity on the removal of the finger-pressure, so as to assume its normal position in the horizontal plane of the remaining series of fingers or keys. The bar is now shifted in 20 one direction or the other, according to the location of the next type-head, and when the latter reaches the correct position over the paper the finger or key is depressed to make the next impression at the proper place. The 25 writing being visible to the operator, the places where the impressions are to be made can easily be seen, so that the bar and the bank of type may readily be shifted, as desired, and the paper is advanced from time to time ac-30 cording to the spacing of the graduations of the scale  $a^3$ .

While I have herein shown a preferred form of carrying my invention into effect, yet I do not desire to limit myself to such preferred

details of construction, but claim the right to 35 use any and all modifications thereof which will serve to carry into effect the objects to be attained by this invention in so far as such modifications and changes may fall within the spirit and scope of my said invention.

I claim—

A type-writing machine comprising a bed forming a paper-platen, a horizontal guideway fixed on the bed above the plane of such 45 paper-platen, a paper-guide on said platen, the graduated scale also on the platen and in parallel relation to said guide, a type-support shiftable freely in said guideway and limited thereby to rectilinear reciprocating 50 movement above the paper-platen, a series of yieldable type-fingers carried by the typesupport, the series of type-heads on said fingers and in a common vertical plane lengthwise of the type-support, and the inking-roll- 55 ers journaled on the bed adjacent to the guideway and disposed in the path of the type-heads for the latter to frictionally brush against said rollers on the shiftable movement of the type-support, substantially as 6c described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

PERCY HULL BROWN.

Witnesses:
GEO. E. T. BROWNE,
WILLIAM CLARK.