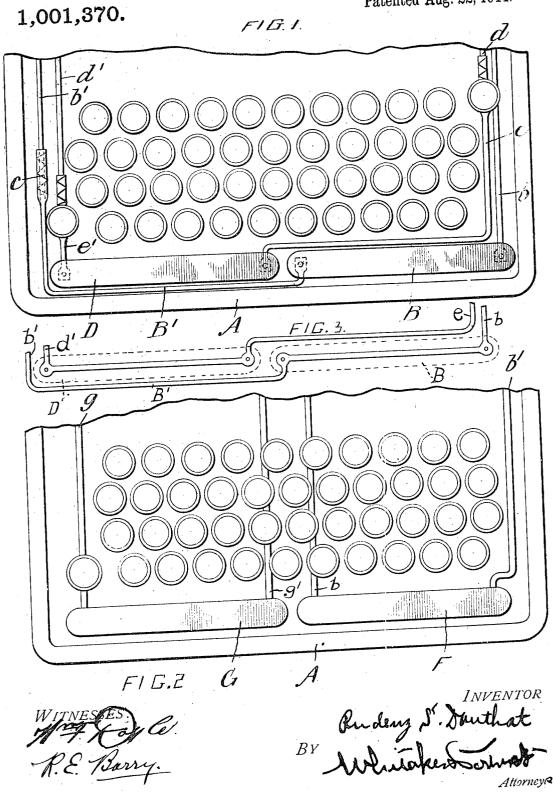
## R. S. DOUTHAT. TYPE WRITING MACHINE. APPLICATION FILED JAN, 18, 1911.

Patented Aug. 22, 1911.



## UNITED STATES PATENT OFFICE.

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## TYPE-WRITING MACHINE.

1,001,370.

Specification of Letters Patent. P

Patented Aug. 22, 1911.

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To all whom it may concern:

Be it known that I, RUDENZ S. DOUTHAT, citizen of the United States, residing at Huntington, in the county of Cabell and State of West Virginia, have invented certain new and useful Improvements in Type-Writing Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-

pertains to make and use the same.

My invention relates to typewriting machines and consists of certain new and useful improvements in attachments for that class of machines, wherein a single key board is used and a slifting mechanism is provided for changing the relative position of the platen or the type basket, in order to permit a capital letter or other selected character to be positioned for printing, and wherein a depressible space bar or key is located in front of the key board for spacing the writing.

My invention relates more particularly to 25 that class of machines wherein the platen or type basket is shifted in a substantially horizontal direction to effect the printing of a capital letter or other selected character.

The main object of my invention is to in-30 crease the case and speed of operating machines of this class, by providing devices by which the shift mechanism may be operated by means of a depressible shift bar, located directly in front of the key board, and ex-33 tending from about the center of the front to the left hand margin of said key board and on a line with the space bar. I accomplish this object in my preferred form of device by dividing the space bar, ordinarily 40 provided for such machines, at about its central portion, and using the left subdivision of said space bar, when properly connected to coacting parts, for operating the shift mechanism, and the right hand subdivision 35 of said space bar, for the spacing required in operating the machine, the shifting and spacing being accomplished by the downward pressure of the left subdivision to ef-

feet the shifting from lower to upper case
for capitals or other selected characters and
by the downward pressure or movement of
the right hand, subdivision for necessary
spacing. This arrangement is especially desirable in order that the operation of shifting, which at present is attained by the use

of the little finger of the left hand of the operator, may be accomplished by means of the left thumb, thus leaving the little finger of the left hand free for the operation of the key hard, and avoiding the present objection of the ordinary machine, wherein it is necessary to vary the fingering of the key board in the operation of the shifting mechanism, thus retarding and hindering the operation of the machine.

My invention has for its further object, the production and arrangement of parts to accomplish the desired results, which may be attached to machines already in use, in a

simple and inexpensive manner.

In order that my invention may be clearly understood, I have illustrated it in the accompanying drawings, and described the same with reference thereto, in the following specification and claims.

In the drawings, Figure 1 is a top plan view of a portion of a type writing machine with my invention attached thereto. Fig. 2 is a similar view of a modific tion of the same. Fig. 3 is a modification of Fig. 1 and 80 shows the connecting rods made integral.

Similar letters of reference indicate iden-

tical parts throughout.

 $\Lambda$  represents the main frame of a type writing machine of the class above referred 85 to and B, D space and shift bars respectively, the two filling the space occupied by the usual space bar, in machines of ordinary construction. The space bar B is secured at one end to the shifting rod b of the machine, 90 and at its other end to the bent rod B' which is secured to the shift rod b' corresponding to the rod b, a portion of said rod b' being removed. The connection between the rod B' and the rod b' may be effected in any 95 desired manner, but in the form shown, I provide the rod B' with an extension c having projecting flanges which may be bent around the rod b' to form a secure joint, as clearly shown in Fig. 1 of the drawings, 100 It is obvious that by pressing downward upon the space bar B, the spacing will be effected in the usual manner. The shift bar D is connected to the shifting mechanism by means of the bent rod e which is secured 105 to the shift bar d in a manner similar to that described in regard to the spacing mechanism. The opposite end of the space bar D has secured to it a short connecting rod e'which is securely fastened to the shift bar 110 d' corresponding to the bar d. The mode of operating the shift bar D is the same as that

relating to the space bar B.

In the form of my invention just de5 scribed, it is obvious that in applying it to
an old machine, the original space bar may
be cut in two, and the right hand portion
connected to the rod b' by means of the
bent rod B', the other end of said space
10 bar being already connected to the rod b.
The other portion of the original space bar
may be used as the shift bar D and connected to the shifting mechanism as already

described.

5 In the form of my invention illustrated in Fig. 1, I have shown the connecting rods for the spacing mechanism outside of the connecting rods for the shifting mechanism, but in some machines this arrange-

this reversal of the arrangement of the said connecting rods does not affect the applicability of my invention to such machines, as it may be applied equally as well to such 25 machines when desired. The shift key on

the connecting rod e is shown as being on a line with the upper keys of the key board, but the shift key may be located in line with the lower set of keys, so that an operator may, when expediency demands

it, use the shift keys as ordinarily placed upon machines, instead of having to rely entirely upon my devices for operating the shift mechanism. It is also obvious that

shift mechanism. It is also obvious that instead of providing connecting parts B and D, I may use an integral connecting rod bent in proper form and connecting the rod d with d' and a similar rod to connect the rod b with b' (as illustrated in Fig. 3).

The form of my invention as above described is particularly applicable to machines already in use, the changes being readily effected and with slight expense.

Where my invention is to be applied in the construction of new machines, I employ the modification shown in Fig. 2 of the drawings. In this form I provide a space bar F which is located at the right of the ma-

chine and within the frame A and connect the same with the space mechanism by 50 means of the two connecting rods b, b'. I also provide a shift bar G of similar construction, and connect it with the shifting mechanism by means of the connecting bars g, g'. The mode of operation is the same 55 as that already described.

What I claim and desire to secure by

Letters Patent is:

1. In a typewriting machine, the combination with means for operating the space 60 ing and shifting mechanism, of a space bar and a shift bar connected therewith, said bars being substantially in alinement with each other and together forming a discontinuous bar extending across the front of 65

the key board,

2. In a typewriting machine, the combination with means for operating the shifting and spacing mechanism, of a shift bar and space bar, the two together forming a discontinuous bar extending across the front of the keyboard, the two parts being substantially in line with one another, bent rods connecting the inner ends of said bars with rods adapted to operate the shift-roing and spacing mechanism respectively, said bent rods being provided with extensions adapted to engage and fasten over the ends of the rods which operate the shifting and spacing mechanism.

3. In a typewriting machine, the combination with means for operating the shifting and spacing mechanism, of a shift bar and space bar, each of said bars extending substantially half way across the front 85 of the keyboard and being substantially in line with each other, and means for connecting the said shift bar and space bar with the shifting and spacing mechanism.

with the shifting and spacing mechanism.

In testimony whereof I affix my signa- 90 ture in the presence of two witnesses.

## RUDENZ S. DOUTHAT.

Witnesses:

F. M. LINEZLY, H. A./ CONNELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."