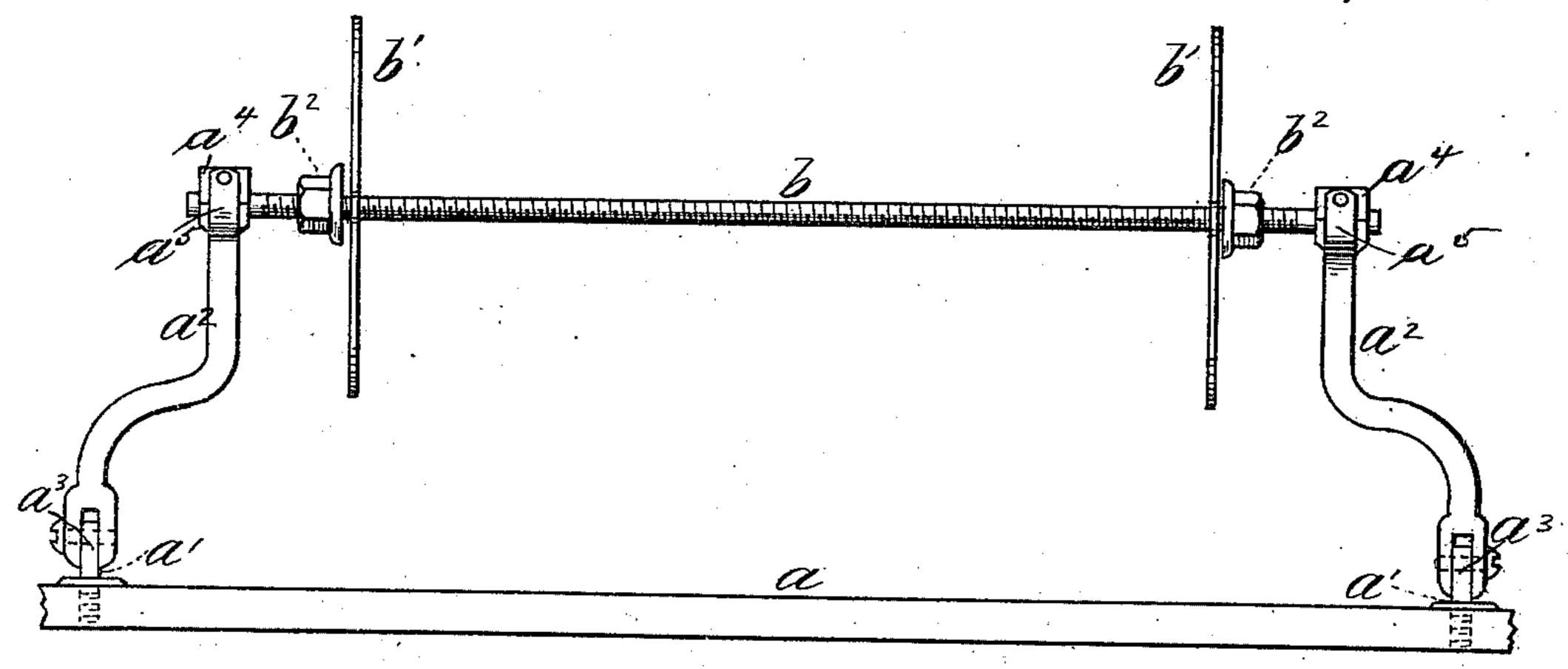
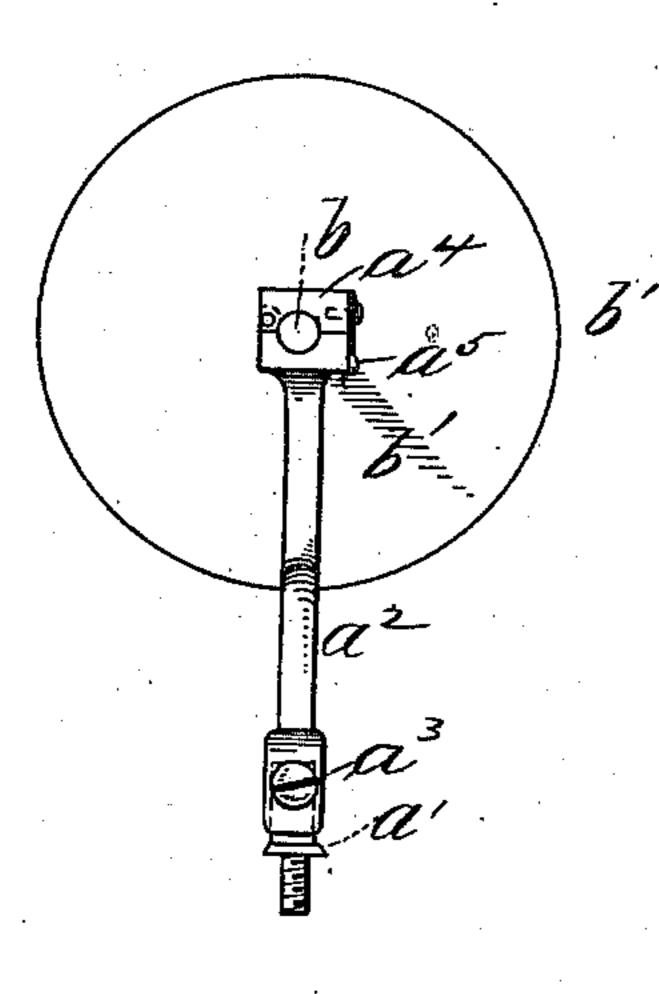
(No Model.)

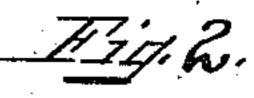
W. BODENBROWN, Jr. TYPE WRITING MACHINE.

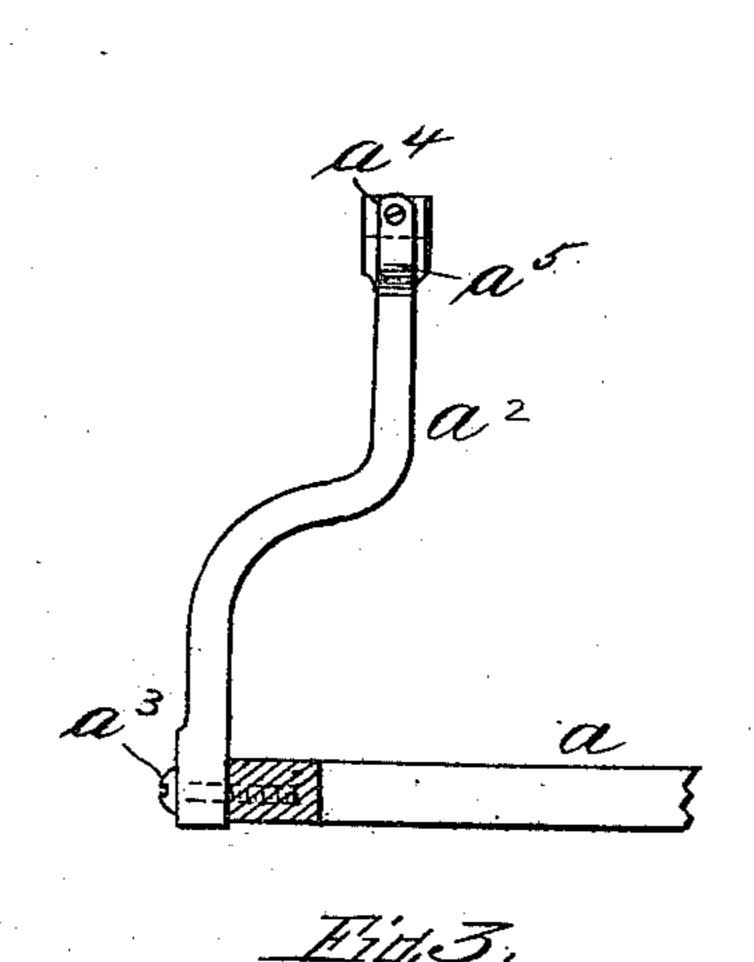
No. 470,346.

Patented Mar. 8, 1892.









Hitresses! John Remow.

William Bodenbrown fr. William Bodenbrown fr. Magnester & Beach

United States Patent Office.

WILLIAM BODENBROWN, JR., OF BOSTON, MASSACHUSETTS.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 470,346, dated March 8, 1892.

Application filed September 14, 1891. Serial No. 405, 598. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BODENBROWN, Jr., of Boston, in the county of Suffolk and State of Massachusetts, have invented a new 5 and useful Improvement in Type-Writing Machines, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation, and Fig. 2 and end view, of my new device detached. Fig. 2 above a modification

3 shows a modification.

My invention is a device for supporting a roll of paper on the planten-carrier of type-writing machines; and it consists, mainly, in the combination of a platen-carrier with a pair of jointed supports for the spindle upon which the roll of paper is mounted.

The object of my invention is to support the paper-supporting spindle in such wise that the roll and spindle and supports may be swung close to the frame of the machine for convenience and cheapness in packing.

Minor features of my invention will be

pointed out hereinafter.

25 In the drawings, a is a part of a platencarrier, and a' a' are studs which may be integral with the part a, if desired, but, as shown, are separate pieces socketed in holes in the platen-carrier, this being a convenient manso nerof securing my new device, which by itself is a feature of my invention to machines already constructed. To each stud a' a spin-

dle-support a^2 is jointed at a^3 , and the spindle b for the roll is secured in any proper manner in the supports a^2 . A convenient ar- 35 rangement of spindle b and supports a^2 is to provide the supports with hinged caps a^4 , held in place by springs a^5 , to cover the bearings of the spindle. Spindle b is preferably threaded to receive the guards b', which pre- 40 vent the paper from displacement upon the spindle, and one or both of which are adjustable on the spindle to suit different widths of paper thereon, the nuts b^2 serving to press the guards against the ends of the roll. This 45 combination of a paper-receiving spindle with one or more adjustable guards is a feature of my invention.

In the modification shown in Fig. 3 the supports a^2 are pinned directly to the part a, 50

the stude a' being dispensed with.

What I claim is—

The combination of a platen-carrier a of a type-writing machine with a paper-supporting spindle b and spindle-supports a^2 a^2 , connecting the spindle b to the platen-carrier, the spindle b being detachable from the supports a^2 a^2 , and the supports a^2 a^2 being hinged to the platen-carrier a, all substantially as and for the purpose set forth.

WILLIAM BODENBROWN, JR.

Witnesses:

EDWARD S. BEACH, JOHN R. SNOW.