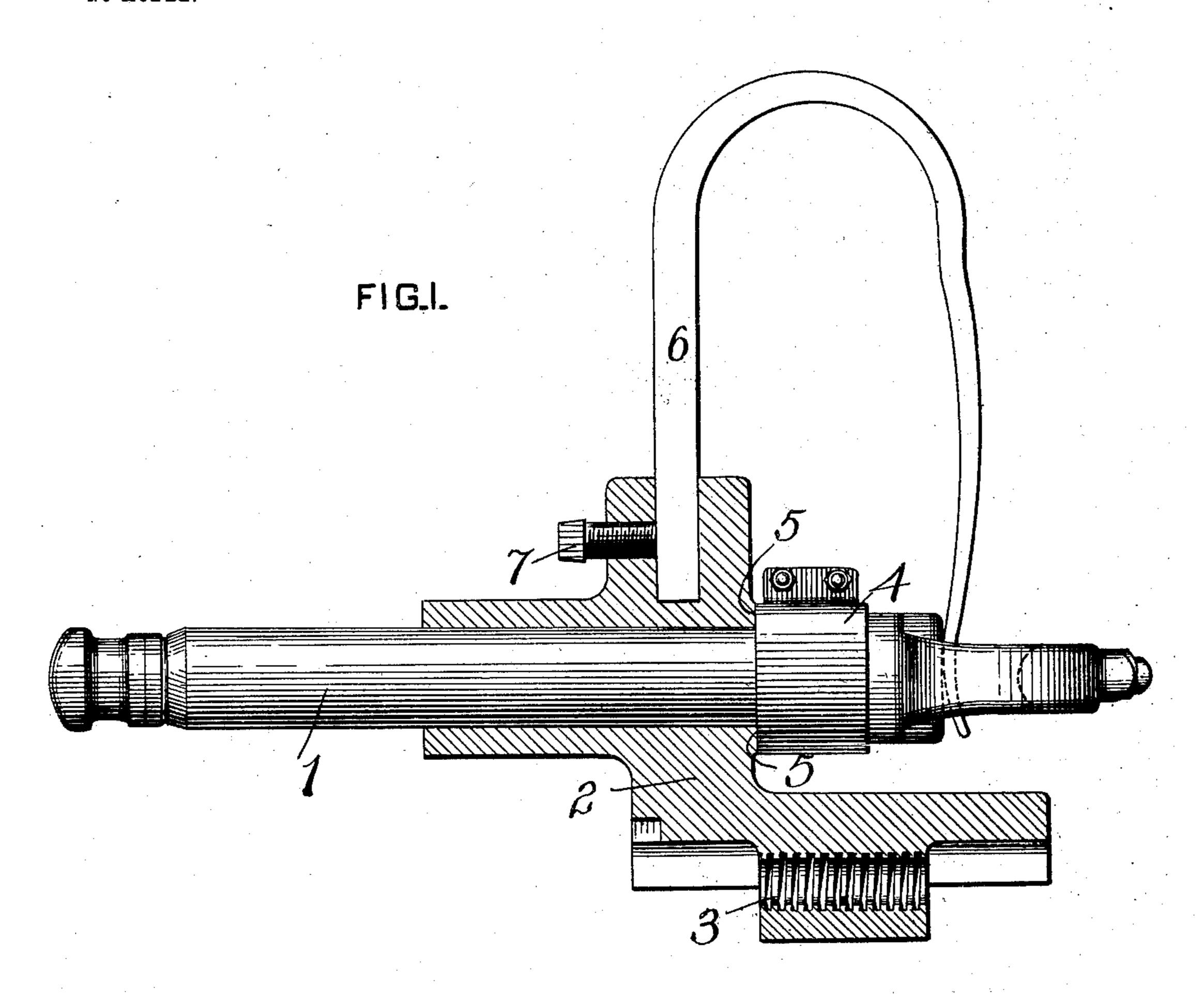
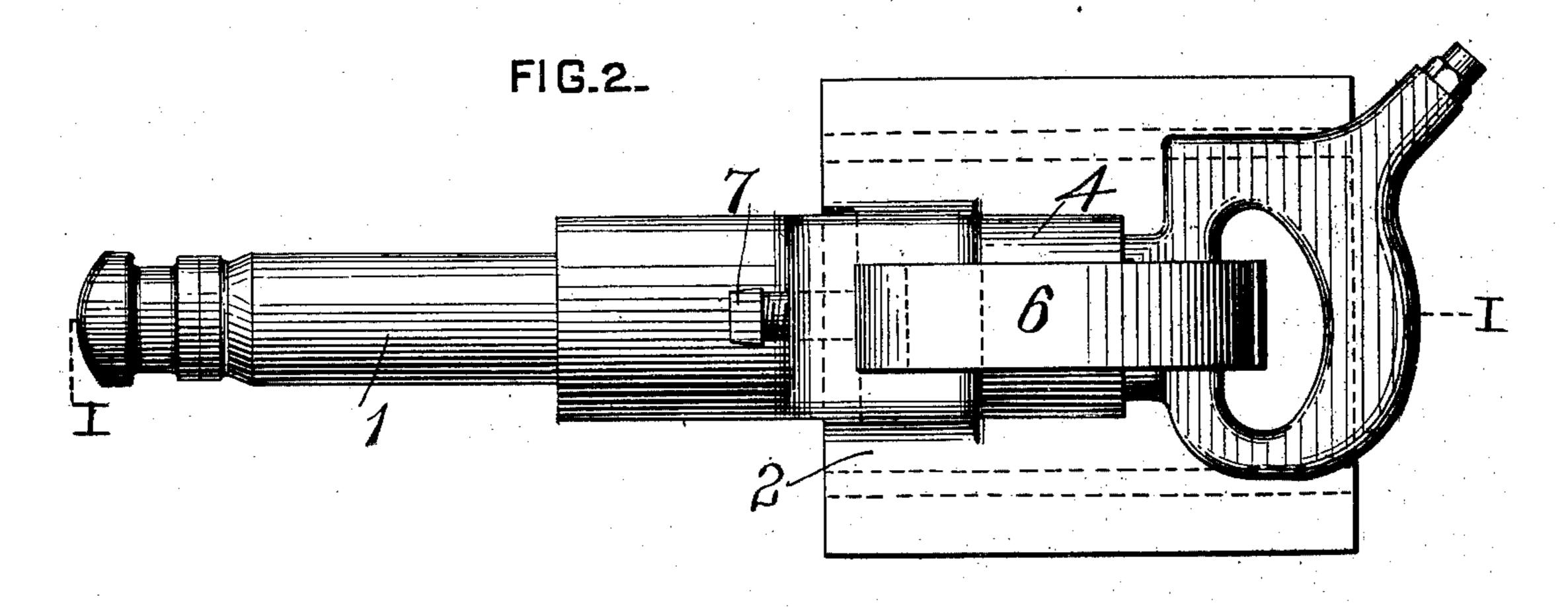
C. R. McKIBBEN. AUTOMATIC HAMMER. APPLICATION FILED APR. 28, 1903.

NO MODEL.





WITNESSES: Herbert Pradley. F.E. Gaither.

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United States Patent Office.

CHARLES R. McKIBBEN, OF PITTSBURG, PENNSYLVANIA.

AUTOMATIC HAMMER

SPECIFICATION forming part of Letters Patent No. 737,952, dated September 1, 1903.

Application filed April 28, 1903. Serial No. 154,639. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. McKibben, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Automatic Hammers, of which improvements the following is a specification.

My invention relates to improvements in automatic hammers; and the object of my improvement is to provide a yielding bearing of the hammer in its carrier and a bearing so constructed that the hammer may readily be applied to and removed from its carrier.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, on the line II, Fig. 2, of an automatic hammer and its carrier which embody my invention; and Fig. 2 is a plan view of the construction shown in Fig. 1.

Parts which are represented in both figures bear the same reference numerals in each case.

The automatic hammer is represented in the drawings by numeral 1. It is shown as a pneumatic hammer of familiar construction, consisting of essentially a cylinder and a hammer-head, the hammer-head protruding from the end of the cylinder and arranged to reciprocate therein.

The carrier for the hammer is represented at 2, and a seat is formed in the carrier suitably shaped to receive the hammer and to permit it to be advanced and withdrawn. A strap-spring 6, preferably of horseshoe shape, serves to hold the hammer advanced in its carrier. This strap-spring is rigidly mounted in carrier 2 and may advantageously be held

in place therein by a set-screw 7, and its free end bears upon a properly-formed surface of the hammer. In consequence of this construction the strap-spring 6 may readily be

removed and the hammer withdrawn from its carrier.

While not an essential feature of construction, I have found it convenient to form 45 upon the hammer a lug or shoulder, such as is shown at 4, and to so dispose this shoulder that it will when the hammer is advanced a certain distance on its seat in the carrier abut against a shoulder 5, formed on the carrier, 50 thus limiting the advance movement of the hammer in the carrier. A screw-thread 3, formed in the carrier, indicates that the carrier may be attached to a suitable support.

My improvement over prior cushioning or spring-adjusting devices for automatic hammers consists in the particular form of spring which I employ and the manner in which the spring is applied. In consequence of this construction I have a simple and efficient in- 60 strument and one which may readily be assembled or taken apart, which is a matter of advantage in operation.

I claim herein as my invention—

1. In combination with an automatic ham-65 mer and its carrier, a strap-spring removably mounted in the carrier and adapted to hold the hammer in operative position in the carrier, substantially as described.

2. In combination with an automatic ham- 70 mer and its carrier, a strap-spring of horseshoe shape, one end of said spring being rigidly mounted in the carrier and the other end bearing upon the hammer, substantially as described.

In testimony whereof I have hereunto set my hand.

CHARLES R. McKIBBEN.

Witnesses:

BAYARD H. CHRISTY, F. E. GAITHER.