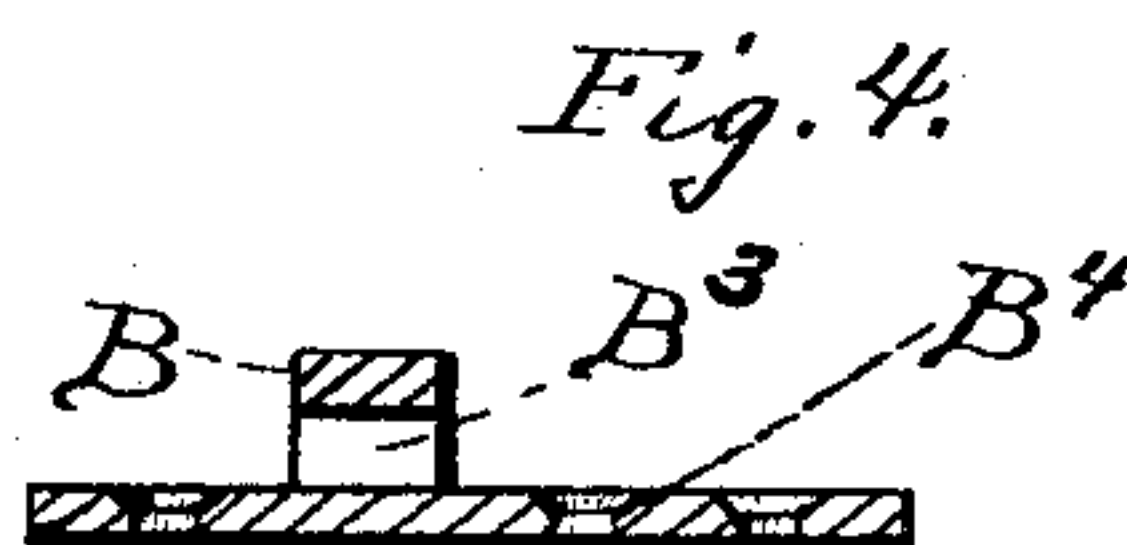
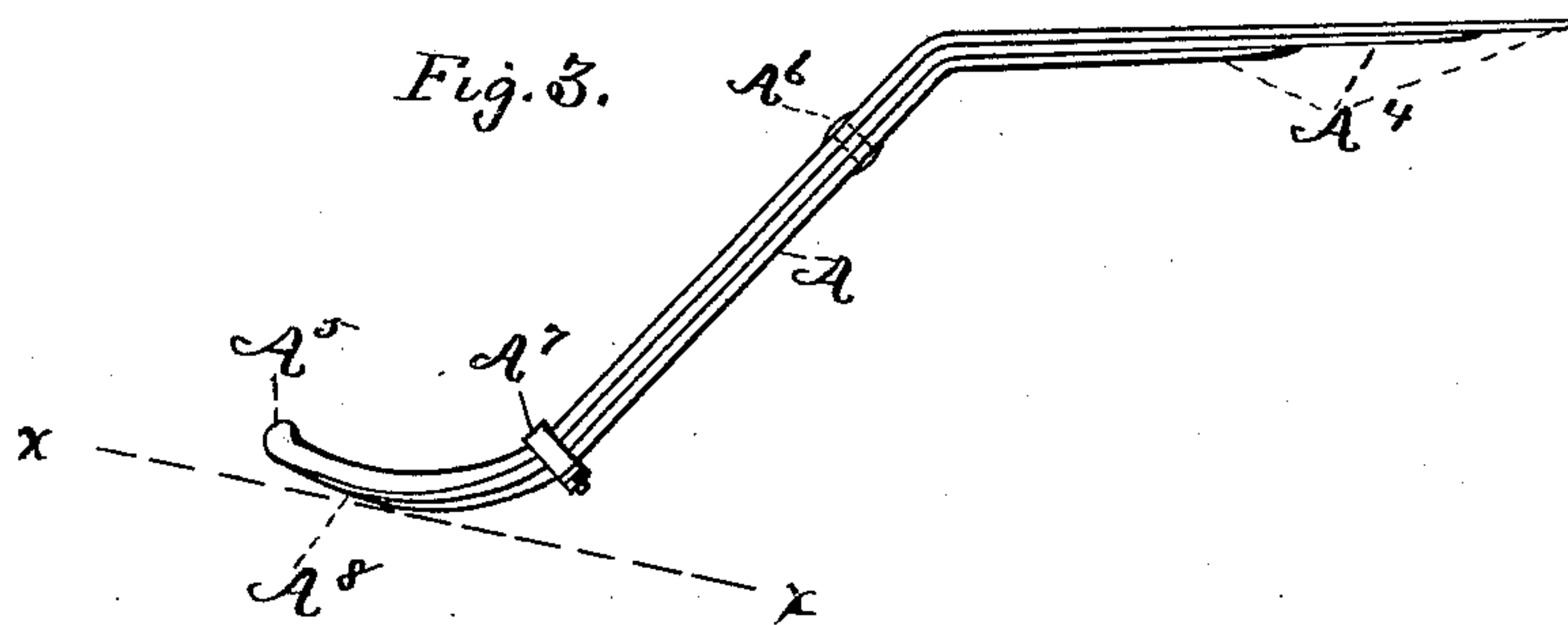
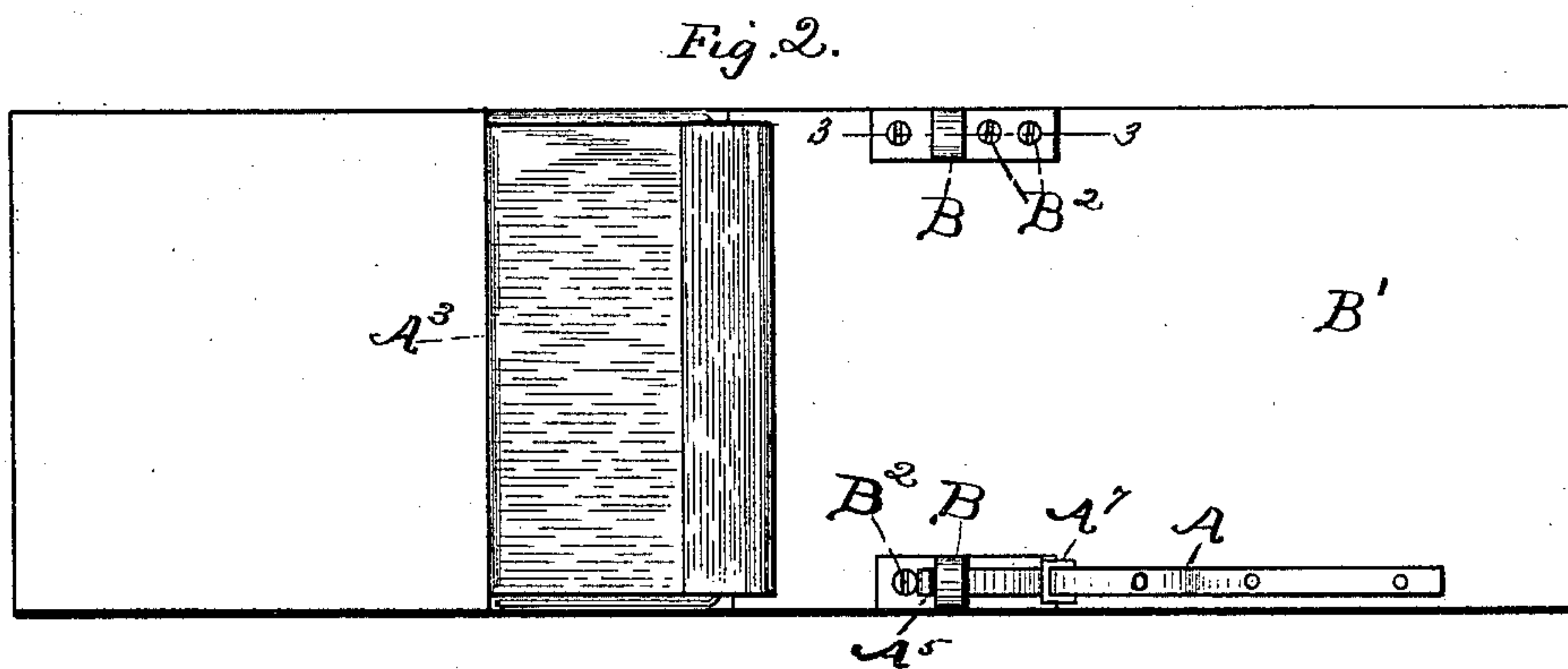
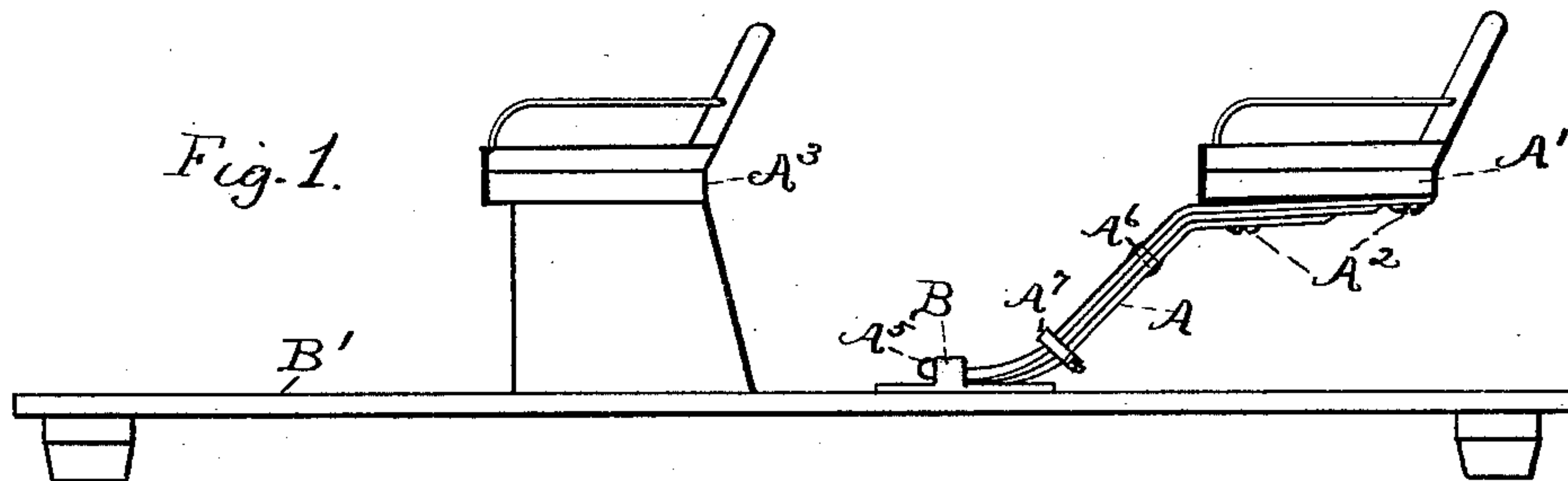


(No Model.)

J. H. WHITE.
DETACHABLE SEAT SPRING.

No. 420,483.

Patented Feb. 4, 1890.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JAMES HYLER WHITE, OF GLENS FALLS, NEW YORK.

DETACHABLE SEAT-SPRING.

SPECIFICATION forming part of Letters Patent No. 420,483, dated February 4, 1890.

Application filed May 10, 1889. Serial No. 310,281. (No model.)

To all whom it may concern:

Be it known that I, JAMES HYLER WHITE, a resident of Glens Falls, in the county of Warren and State of New York, have invented certain new and useful Improvements in Detachable Seat-Springs; and I do hereby declare that the following is a full, clear, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures.

My invention relates to improvements in detachable seat-springs; and it consists of the novel construction and combination of parts, hereinafter described, and pointed out in the claims.

Figure 1 of the drawings is a side elevation of the body and seats of a buckboard wagon detached from the axles and wheels, showing my improved spring in use. Fig. 2 is a top plan view of the same with one spring only attached without its seat. Fig. 3 is a side elevation of my improved spring detached. Fig. 4 is a central longitudinal section of the spring-supporting socket detached, taken on broken line 3 3 in Fig. 2.

In the use of long buckboards or market and express wagons it frequently happens that two seats are necessary, while at other times only one is required, and a second seat would be detrimental to the style and appearance of the wagon or reduce its carrying capacity.

Various devices have been employed for detachably securing a seat to a wagon-body.

I make use of one or more springs A, which are secured at one end to a seat A', as by screws or bolts A². The other end is adapted to be easily and quickly slid in and out of a socket B, fixed upon wagon-body B', as by the screws or bolts B². The seat A³ is also fixed upon the wagon-body, in any well-known manner, in substantially the position shown in Figs. 1 and 2. The spring is preferably made up of a plurality of leaves A⁴, although

a single leaf may be employed when desired. The lower end of the spring, which is inserted within the socket, as shown in Figs. 1 and 2, is provided with an enlarged or thickened head A⁵, which is adapted to pass entirely through the eye or socket-opening B³ and engage with the edge of the socket-wall to prevent the withdrawal of the spring from the socket when in use. The ends of the spring are approximately parallel with each other and horizontal when in use.

In Fig. 3 the broken line *xx* represents a horizontal plane, and the solid lines the relative position of the spring when supporting no load.

When a plurality of leaves are employed, they may be secured to each other by a rivet A⁶ or by a clip A⁷, when desired, or by both.

I prefer to employ two sockets permanently fixed upon opposite sides of the wagon-body, as shown in Fig. 2, and two springs—one upon each end of the seat—adapted to enter such sockets, as explained, although it is obvious that one central spring and socket could be employed to support a seat.

It should be observed that the lower surface of the lower end of the spring is slightly curved or convexed, as shown at A⁸ in Fig. 3.

The spring acts upon the principle of a lever of the first class, the socket-plate B⁴ being the fulcrum, the socket-wall the power which holds the end or head A⁵ in a fixed position, and the seat A' the weight to be sustained.

To detach the spring and its seat, it is only necessary to raise the seat, thereby causing the convexed surface of the spring to rock upon its fulcrum until the head A⁵ is disengaged from the edge of the socket-walls, and then withdraw the spring from the socket.

What I claim as new, and desire to secure by Letters Patent, is—

1. An improved article of manufacture consisting of a detachable seat-spring provided at its upper end with means for attaching the spring to the seat, and having at its lower end a rocker bearing-surface on the lower side and a socket-engaging head on the upper side, substantially as described.

2. The combination, with a detachable seat-spring having at its lower end a rocker bearing-surface on its lower side and a socket-engaging head on its upper side, of a seat secured to the upper end of the spring, a wagon-body, and a head-receiving socket and spring-supporting plate secured to the wagon-body, substantially as described.

In testimony whereof I have hereunto set my hand this 3d day of May, 1889.

JAMES HYLER WHITE.

Witnesses:

CALHOUN S. EUCHES,
ALBERT H. THOMAS.