

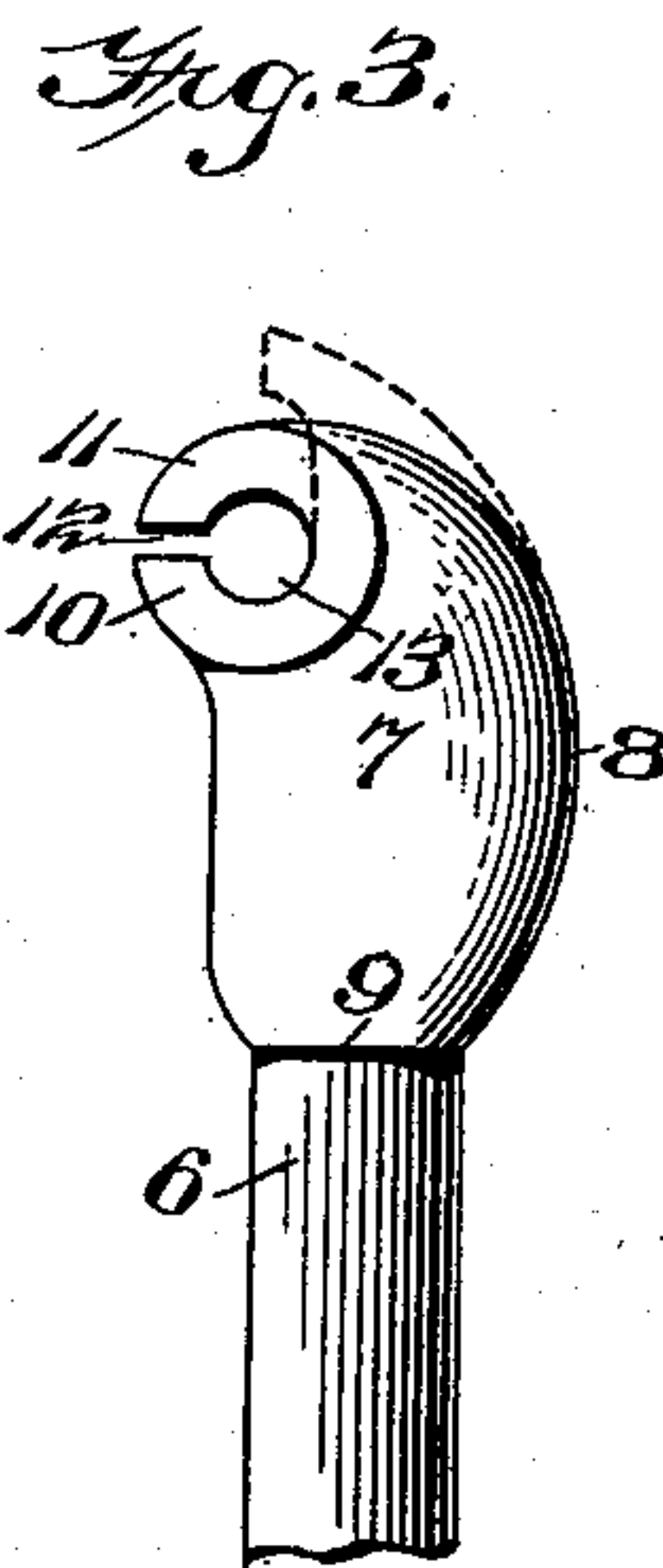
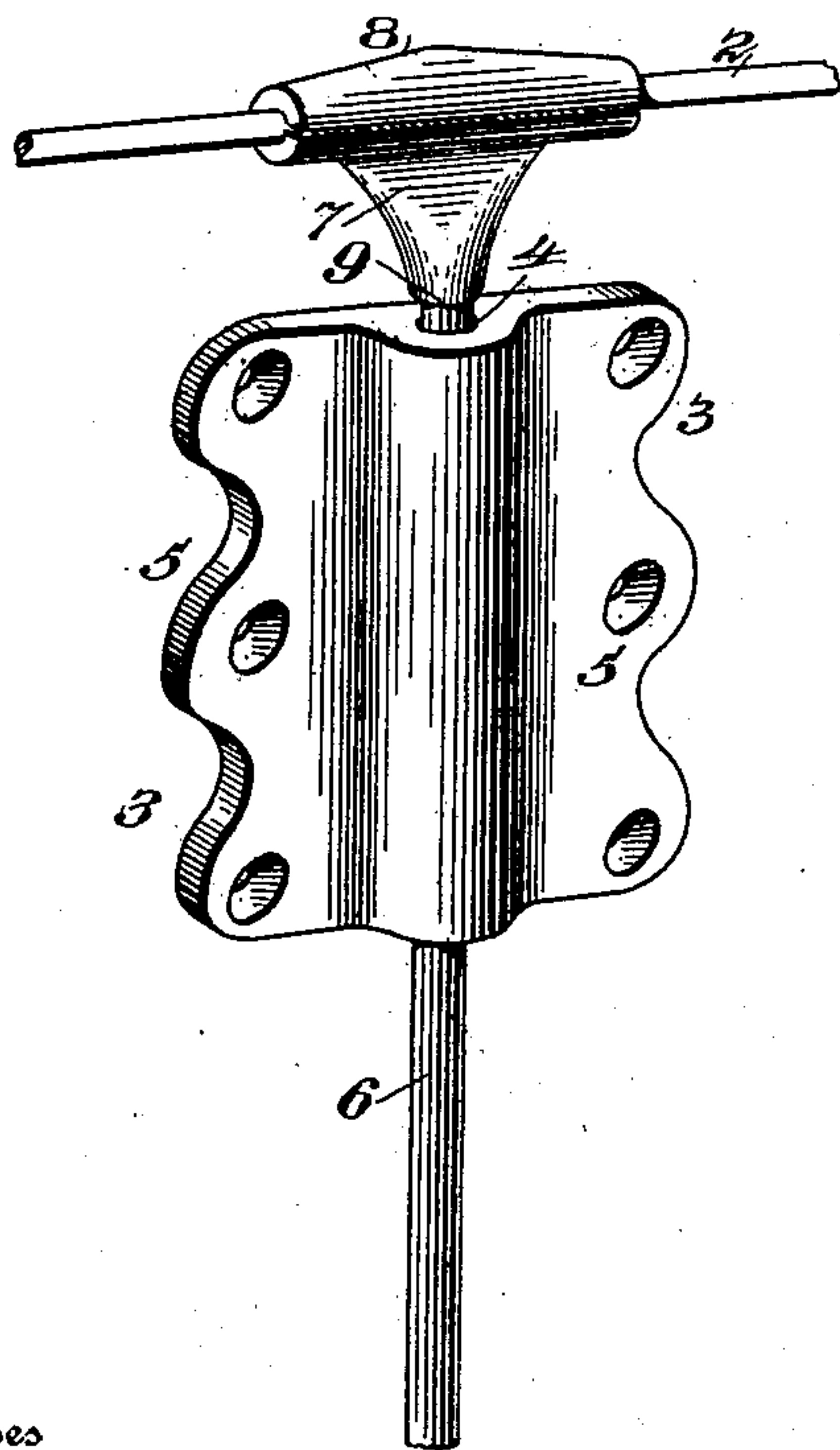
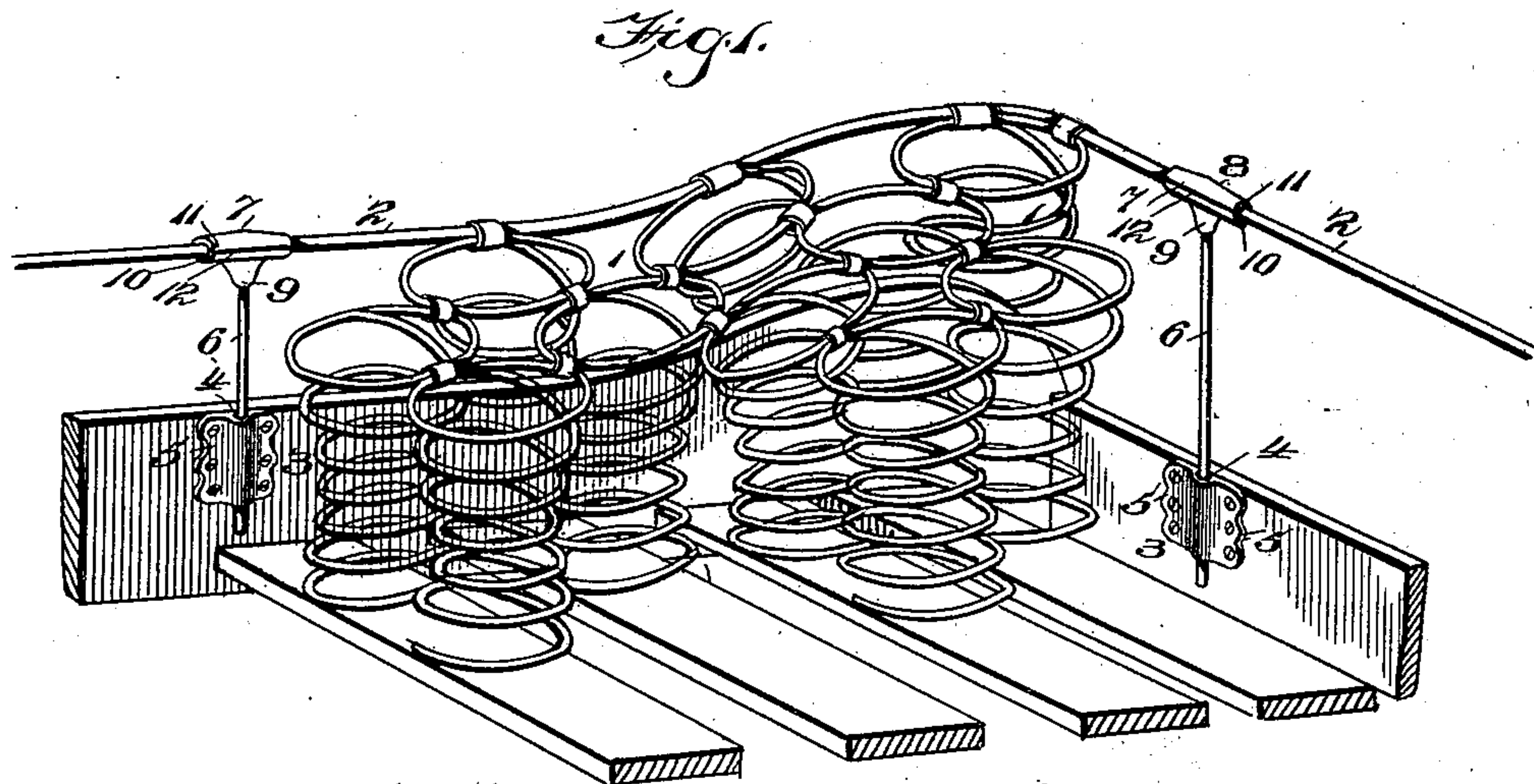
No. 710,260.

Patented Sept. 30, 1902.

W. G. ENGLE.
SUPPORT FOR SPRING STRUCTURES.

(Application filed Nov. 22, 1901.)

(No Model.)



Witnesses

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SUPPORT FOR SPRING STRUCTURES.

SPECIFICATION forming part of Letters Patent No. 710,260, dated September 30, 1902.

Application filed November 22, 1901. Serial No. 83,306. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. ENGLE, a citizen of the United States, residing at Enderlin, in the county of Ransom and State of North Dakota, have invented new and useful Improvements in Supports for Spring Structures, of which the following is a specification.

This invention relates to supports for spring structures, and has particular reference to means for maintaining the springs of couches, chairs, and the like in place; and the object of the same is to prevent springs from sagging or becoming distorted after continued use and also replace the ordinary means of securing the frame-wires of springs, which have been found ineffectual for the purpose by reason of their fragile nature and the consequent liability of the same to become easily broken and permit the springs to sag or shift both laterally and longitudinally with detriment to the couch, chair, or the like.

Heretofore it has usually been customary to use twine in the construction of upholstered furniture to keep the springs in their proper position; but for reasons before set forth this mode of securement has proved very unsatisfactory.

The present improvement primarily contemplates a vertically reciprocating or movable rod or post having a horizontally-extended head formed of bendable or malleable metal to receive the upper frame-wire marginally surrounding a spring structure, whereby the said head may be readily attached to said frame-wire without requiring a complex manipulation.

The invention further consists in the details of construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a portion of a spring structure, showing the improved device applied thereto in operative position. Fig. 2 is a detail perspective view of the parts comprised by the improved device or attachment. Fig. 3 is an end elevation of a part of the device, showing a portion thereof elevated in dotted position.

Similar numerals of reference are employed

to indicate corresponding parts in the several views.

The numeral 1 designates a wire spring structure shown in part in the accompanying drawings and embodying the usual marginal frame-wire 2, and to the said frame-wire the improved supporting device is applied.

In applying the improved support to couches or other large structures a socket 3 will be used and comprises a central vertically-apertured enlargement 4 and side flanges 5 to receive securing devices, such as screws or the like. The aperture in the body 4 extends entirely through the latter, and therein is inserted a vertically-movable rod 6 of such length as to give an elongated rise and fall, so as to accommodate the maximum resilient movement of the spring in opposite directions without liability of the said rod becoming disengaged from the socket. On the upper end of the rod 6 is a head 7, having a reinforcing enlargement 8 at the side, which will be outward from the spring, a shoulder 9 being formed at the juncture of the rod with the head to engage the upper end of the socket and limit the downward movement of the head and rod. The head 7 is constructed of bendable or malleable metal and is elongated at its upper portion in a horizontal direction and formed with jaws 10 and 11 by cutting the said upper portion of the head inwardly a suitable distance, as at 12, the cut through the head leading to a bore 13, in which the marginal frame-wire or other similar part of the spring structure is inserted.

In applying the head 7 to the frame-wire or other part of a spring structure the jaws 10 and 11 are first forced open to permit the wire to be seated in the bore 13, and afterward the said jaws will be closed, it being understood that the socket 3 will be secured in proper position below the said frame-wire to an adjacent portion of the framework of the couch or other device having the spring structure thereon. It is preferred to apply the improved support at the ends and sides of the spring structure, one of the devices being located at each side of said structure and two at the opposite ends; but this number may be increased proportionately to the

dimensions of the said spring structure. As the spring moves the rod 6 will rise and fall in the socket 3 correspondingly to the similar movements of the spring structure, and the latter will be prevented from shifting or becoming distorted in lateral and longitudinal directions by the resistance set up by the heads and the rods of the improved attachments. This obstruction to the irregular movement of the spring structure is not only beneficial in preserving said structure in regular form, but will also prevent wear on the adjacent portions of the upholstery of the couch or like device containing the spring.

It will be understood that in applying the improved supporting device to articles of furniture varying in size and proportions the dimensions and proportions of the parts of the supporting device will be accordingly varied.

It is also obvious that changes in the form,

size, proportions, and minor details may be resorted to without in the least departing from the spirit of the invention.

Having thus described the invention, what is claimed as new is—

A support for a spring structure comprising a socket and a rod vertically movable in the said socket and provided with a head at the upper extremity formed of malleable metal and provided with an outer reinforced enlargement, the said head having bendable jaws leading to an elongated bore in the plane at right angles to the rod.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM G. ENGLE.

Witnesses:

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