

(No Model.)

I. L. NEELY.
SPUDDING SHOE.

No. 555,110.

Patented Feb. 25, 1896.

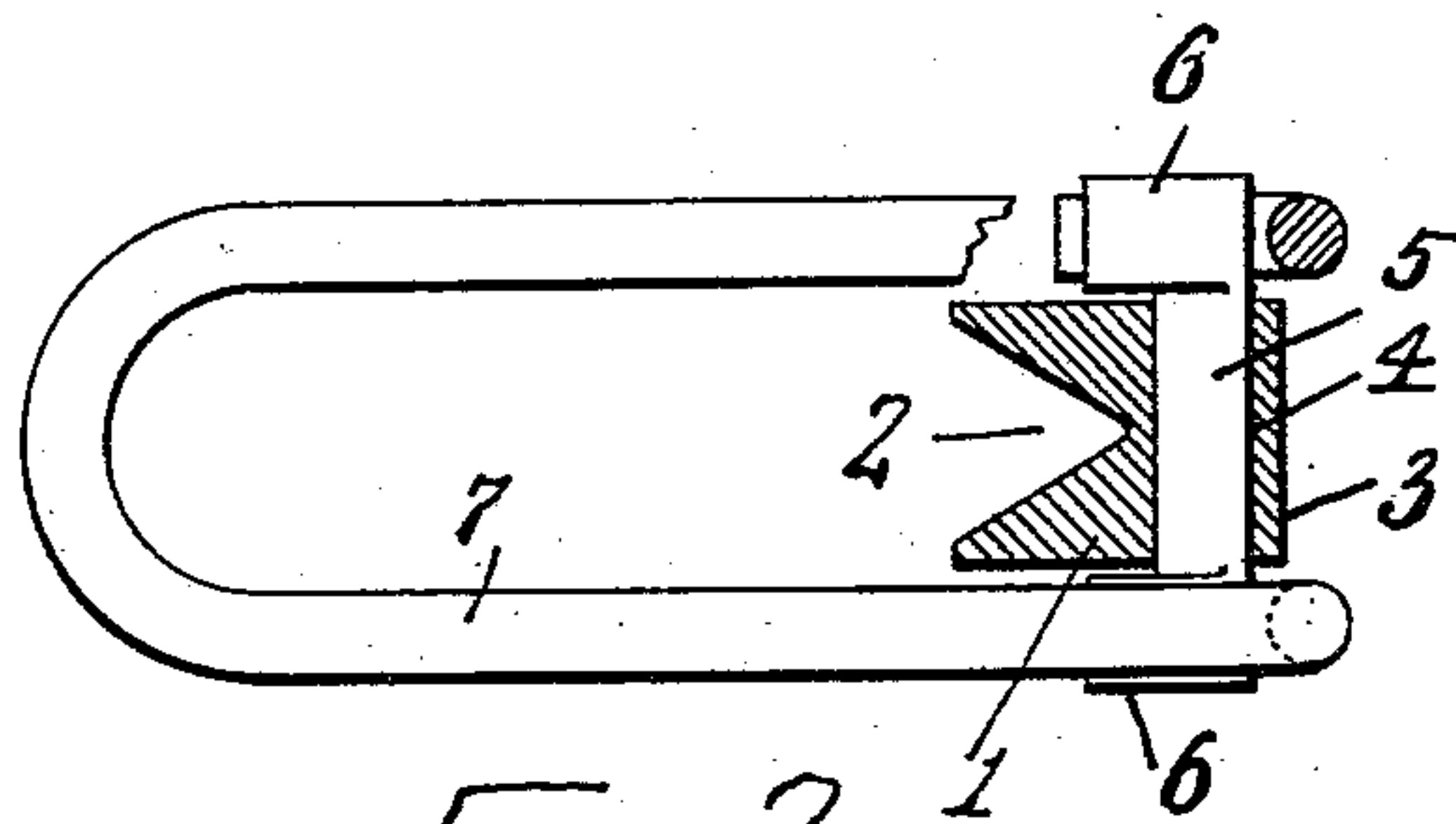


Fig. 2.

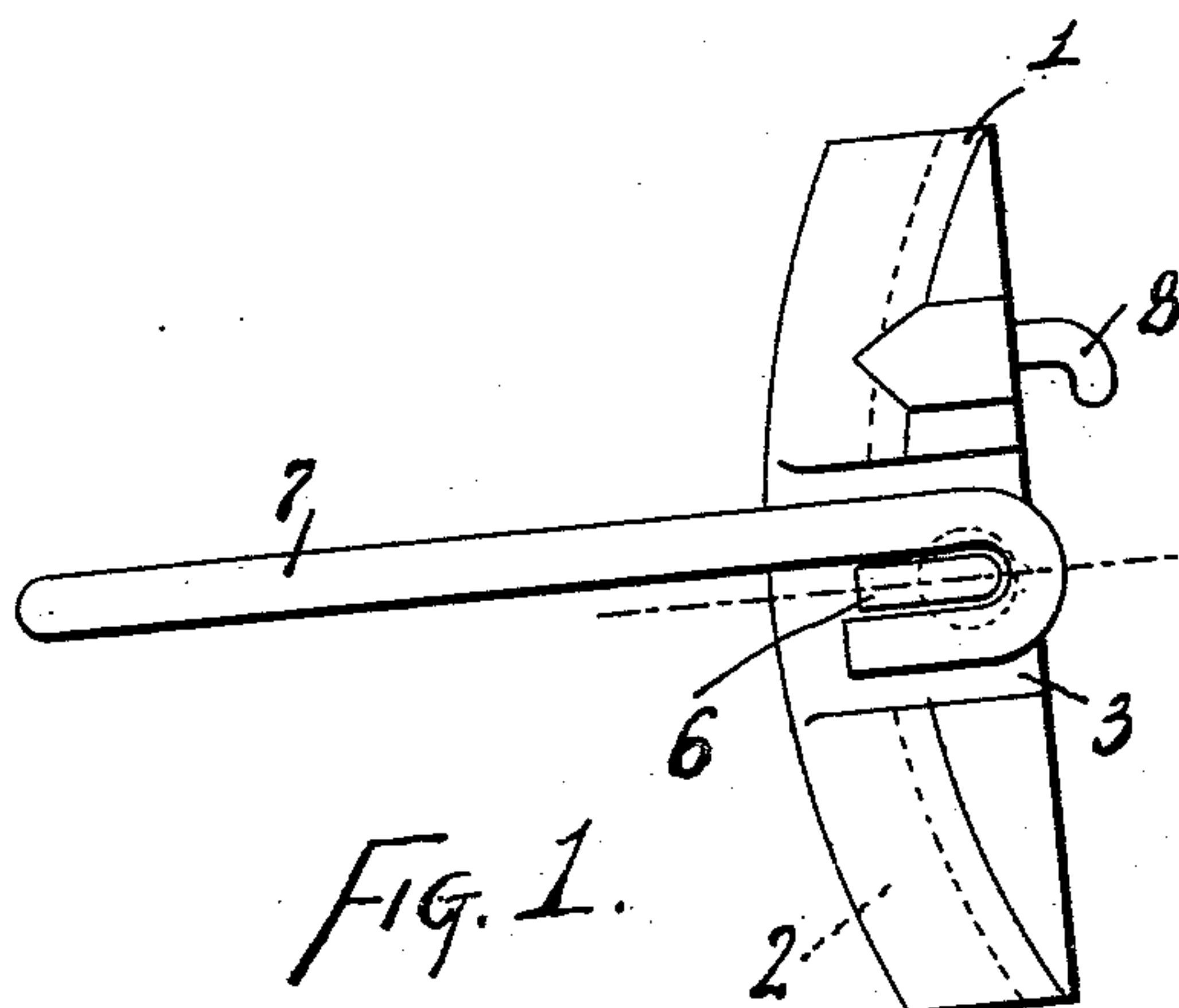


Fig. 1.

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UNITED STATES PATENT OFFICE.

IRA L. NEELY, OF ST. MARY'S, OHIO.

SPODDING-SHOE.

SPECIFICATION forming part of Letters Patent No. 555,110, dated February 25, 1896.

Application filed September 23, 1895. Serial No. 563,304. (No model.)

To all whom it may concern:

Be it known that I, IRA L. NEELY, of St. Mary's, Auglaize county, Ohio, have invented certain new and useful Improvements in Spudding-Shoes, of which the following is a specification.

This invention pertains to improvements in devices known as "spudding-shoes" and employed by well-drillers when giving the up-and-down motion to tools, &c., by means of side jerks given on a so-called "spudding-line" instead of operating vertically by means of the walking-beam.

My improved spudding-shoe will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of a spudding-shoe exemplifying my improvements, while Fig. 2 is a horizontal section of the same in the plane of line *a* of Fig. 1.

In the drawings, 1 indicates the shoe-casting having a segmental front; 2, a V-shaped groove in the segmental front of the shoe, the curve of the shoe being such as to be adapted to the bends in the spudding-line, and the cross-section of the groove being such as to cause the shoe to bite upon the spudding-line, so as not to slip when under transverse strain; 3, a lug or reinforcement at the back of the shoe at about its center of height; 4, a horizontal bearing extending across through this lug from side to side of the shoe; 5, a journal-pin fitting freely within this bearing and extending at each side face of the shoe; 6, flat wide heads upon each end of the journal-pin, these heads being formed by flattening down the ends of the pin to reduce its thickness and to expand it transversely beyond the bore in which the pin fits, so that the pin, while free to turn in its bearing, is incapable of endwise displacement therefrom, the forming of heads 6 being accomplished as to one of the heads by inserting the pin in round form while hot and then swaging it down to form the head; 7, a bail extending forwardly from the shoe and having its rear

ends hooked to fit the flattened heads 6 of the journal-pin, the bail straddling the shoe, and 8 a hook secured in the rear of the shoe above its center.

In using this shoe the bail is disconnected from the journal-pin and the groove of the shoe is placed against the vertical spudding-line with which it is to work. The shoe may, if desired, be suspended by a light line extending from hook 8 to a proper point of suspension. The bail is then hooked onto the journal-pin and the jerk-line attached to the bail. Then, when horizontal or diagonal downward pulls are given to the jerk-line the spudding-line will be deflected and correspondingly shortened in a vertical direction, a repetition of jerks producing a repetition of shortenings and lengthenings of the spudding-line and a consequent rise and fall to the pulls or other devices controlled by the spudding-line. As the spudding-line is fed endwise in the progress of the work, the shoe may be shifted along the line, but while the shoe is under strain upon the spudding-line the line is held in the groove of the shoe and slipping is prevented. In the motions of the shoe the bail has a pivotal motion with reference to the shoe, the wear due to this pivotal motion taking place between the journal-pin and its bearing, the hooks of the bail being subjected to no destructive wear.

I claim as my invention—

In a spudding-shoe, the combination, substantially as set forth, of a segmental shoe having its upright front face formed with a V-shaped groove and having a horizontal transverse bearing to the rear of the groove, a journal-pin fitting said bearing and having flattened widened heads at each of its ends beyond the sides of the shoe, and a bail straddling the shoe and having hooked ends engaging the flattened heads of the journal-pin.

IRA L. NEELY.

Witnesses:

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