(No Model.)

A. HYDE.

WRENCH.

No. 286,543. Patented Oct. 9, 1883.

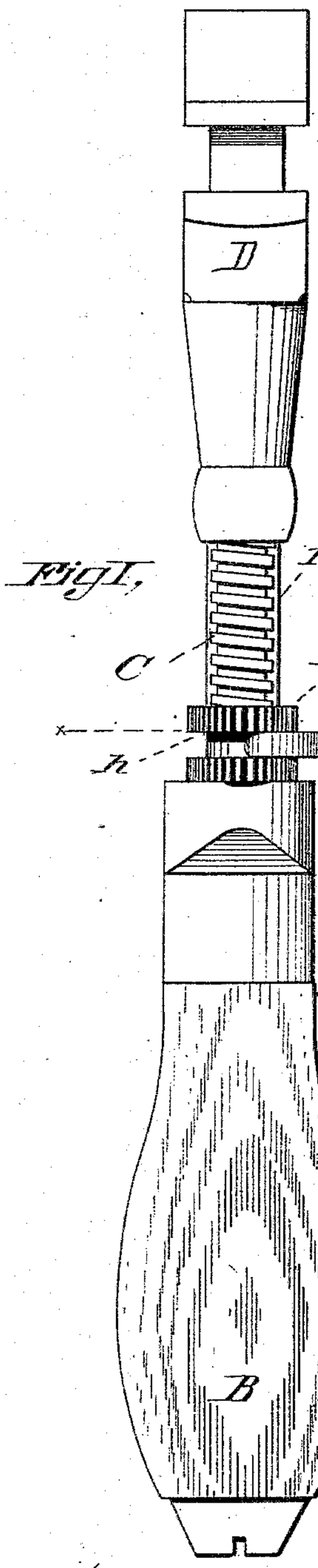

Fig I,

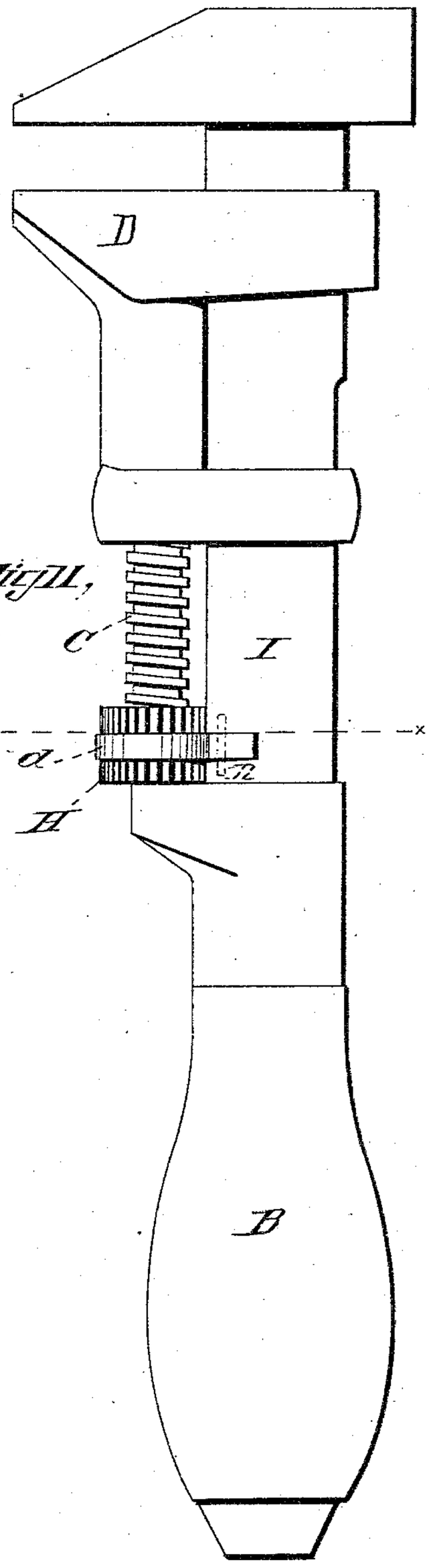

Fig II,

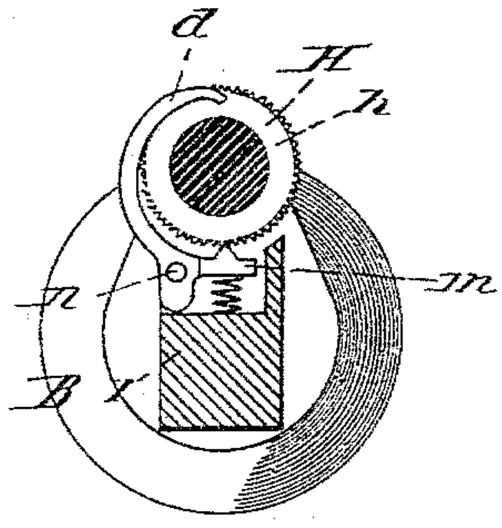

Fig III,

Witnesses,
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UNITED STATES PATENT OFFICE.

ANDREW HYDE, OF HATFIELD, MASSACHUSETTS.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 286,543, dated October 9, 1883.

Application filed March 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, ANDREW HYDE, a citizen of the United States, residing at Hatfield, in the county of Hampshire and State of Massachusetts, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention belongs to that class of wrenches having an inner jaw adjustable by means of a thumb-nut capable of being rotated by a finger of the hand grasping its handle, and of which the "monkey-wrench" is a type; and it consists in the combination, with the thumb-nut and an adjacent fixed point, of a spring-detent arranged to engage with the roughened outer surface of the nut to hold it, and having an arm adapted to be moved by the finger rotating the nut in either direction to free the nut, the object of the invention being to prevent the exact adjustment of the jaws from being accidentally changed, while permitting their manipulation by the usual movement of the thumb of the hand grasping the wrench.

In the drawings, Figure I is a plan view of a wrench having my improvement. Fig. II is a side view of the same, and Fig. III is a section on the line *x x*, Figs. I and II.

B is the handle. D is the inner jaw. C is the screw. H is the thumb-nut, and I is the bar. As shown, the nut H, having the usual milled perimeter, has the annular channel *h* formed therein.

Beneath the nut H and recessed in the bar I is the spring-detent *m*, hinged at *n*, and prolonged into the curved arm and thumb-piece *d*. The piece *d* is arranged to be in the path of the thumb pressing upon the nut H to rotate it, and, having a smooth surface, offers no obstacle to the movement of the thumb, which, in rotating the nut in either direction, depresses the arm *d* into channel *h* and passes over it, thereby swinging the detent *m* clear from the milled nut-surface, and holding it in that position. When the required adjustment of the jaws is obtained, the removal of the thumb from the nut H brings the detent *m* into operation to prevent any jar or accidental contact of the thumb-nut with any object from changing the position of the jaws of the wrench.

In practice I prefer to arrange the spring-detent, as shown, to engage with the milled perimeter of the thumb-nut and to have the arm *d* work in the channel *h*, whose walls guide the part *d* in its swing, though, without departing from the spirit of my invention, the arm *d* can be made to work upon one side of the nut and the spring-detent to engage with teeth or corrugations upon the side of the thumb-nut.

What I claim is—

The within-described improvement in wrenches, consisting of the combination, with a jaw-operating thumb-nut, of a spring-detent adapted to engage with a roughened surface of said nut, and provided with a thumb-piece adapted to be depressed by the rotating finger to disengage said detent, all substantially as set forth.

Witnesses: ANDREW HYDE.

W. B. HENDERSON,

C. H. PIERCE.