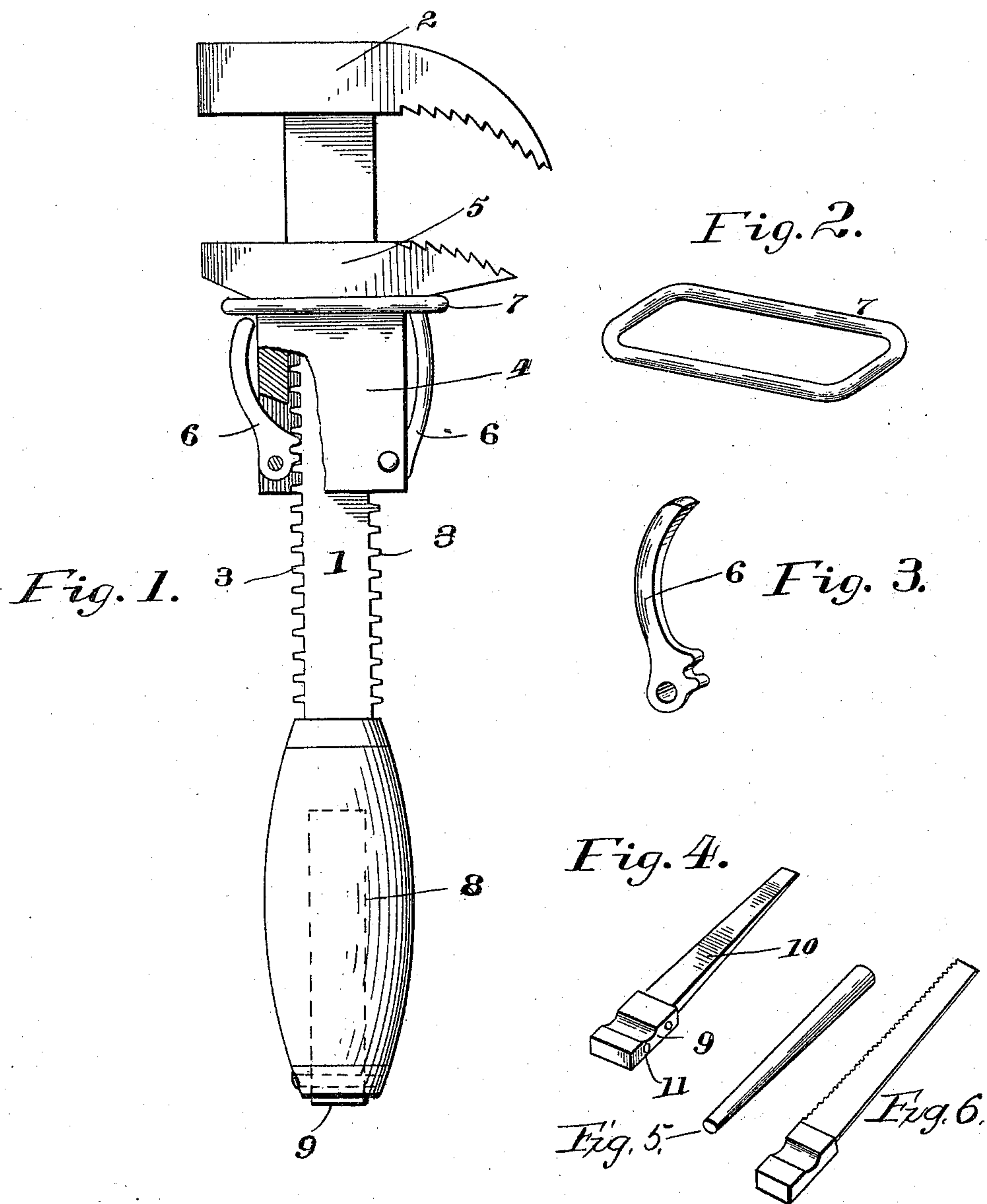


(No Model.)

E. P. GAINES.
WRENCH

No. 598,504.

Patented Feb. 8, 1898.



Witnesses

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ELI PRESTAIN GAINES, OF FAIRLAND, INDIAN TERRITORY.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 598,504, dated February 8, 1898.

Application filed September 16, 1897. Serial No. 651,882. (No model.)

To all whom it may concern:

Be it known that I, ELI PRESTAIN GAINES, a citizen of the United States, residing at Fairland, in the Cherokee Nation, Indian Territory, have invented certain new and useful Improvements in Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to a novel construction of wrenches, and this may be adapted to carry several other useful implements, the object being to provide an inexpensive and durable tool of this kind.

This invention consists in features of construction hereinafter fully described and specifically claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation, partially broken away, of a monkey-wrench constructed in accordance with this invention. Fig. 2 is a perspective view of the clamping-ring. Fig. 3 is a similar view of one of the toothed detents which hold the movable jaw in place. Figs. 4, 5, and 6 are respectively views of a screw-driver, punch, and saw intended for use in the end of the wrench-handle.

Referring now to said drawings, 1 indicates the stem of the wrench, upon one end of which is formed a handle, while the opposite end is provided with a claw-hammer head 2, which forms one of the jaws of the wrench. The said stem 1 is toothed on opposite sides, as shown at 3. Mounted upon the stem 1 is a sliding sleeve 4, having the jaws 5 at one end thereof, which act in conjunction with the jaws formed by the hammer-head, it being noted that the jaw on one side forms the nut-wrench, while the jaws on the other side are toothed, as shown, to provide a pipe-wrench. The sleeve is cut away opposite the toothed portion of the stem to receive the end of the toothed detents 6, that project through the openings in the sleeve and coact with the toothed portion of the stem. The outer ends of these detents are curved, and the parts are so arranged that when the outer end of the detents rest upon the outer side of the sleeve the teeth thereof engage the teeth of the stem. A clamping-ring 7 surrounds the sleeve and

serves to hold the detents in their operative position by being wedged upon the outer sides or wedged faces of the detents. When this ring is moved toward the jaw of the sleeve, the detents on one side can be thrown outwardly as the ring moves beyond the end thereof, after which the ring can be passed downwardly and over the wedged face of the other detent, whereby this latter detent can be thrown downwardly to remove its teeth from engagement with the teeth of the stem, whereby the sleeve can be moved back and forth to regulate the relative position of the jaws of the stem and sleeve. When the sleeve is adjusted, one detent is thrown into position, after which the ring is moved upwardly and over the same, and then after the other detent is thrown into operative position the ring is wedged upon the inclined faces of the detents to hold them in position.

The end of the stem is hollow, as shown at 8, to provide a receptacle in each implement—for instance, a saw-blade and punch can be carried—while the end of this receptacle is closed by a block 9, upon one end of which a screw-driver 10 is formed. This block fits within the end of the receptacle and is held in place by a suitable screw or pin, as shown, while in the side of the block are openings 11, that serve as rivet-seats. When not in use, the screw-driver is inserted within the receptacle, and the block is held in position by the pin. When it is desired to use the screw-driver, the block is removed and reversed and then secured within the end of the receptacle.

From the foregoing description it will be seen that an inexpensive but convenient tool is provided, consisting of a monkey-wrench, a pipe-wrench, a claw-hammer, a screw-driver, a leather and iron punch, a saw, and a rivet set.

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

1. A monkey-wrench comprising a toothed stem having a jaw at one end thereof, a sliding sleeve upon said stem having a jaw to coact with the jaw of the stem, toothed detents carried by said sleeve and projecting through the openings therein, and a ring upon said sleeve for holding said detents in position.

2. A monkey-wrench comprising a toothed

stem having a jaw at one end thereof, a sliding sleeve upon said stem having openings in the sides thereof, toothed detents pivoted within said openings to coact with the teeth of the
5 stem and having wedge-shaped end pieces, and a ring surrounding said stem to coact with said wedge-shaped end portions of the detents.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ELI PRESTAIN GAINES.

Witnesses:

WM. M. WILSON,
W. P. McCULLOUGH.