(No Model.)

C. P. PAYNE.

PIPE WRENCH.

No. 551,689. Patented Dec. 17, 1895.

Fig. 1

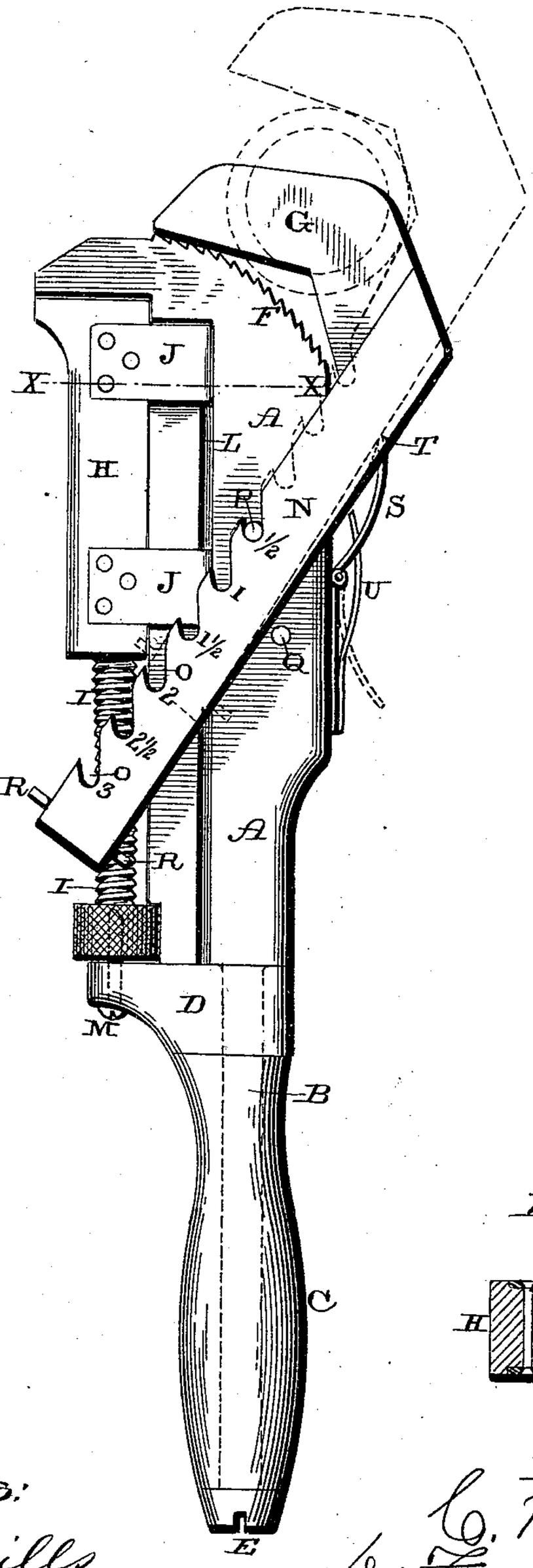


Fig. 2.

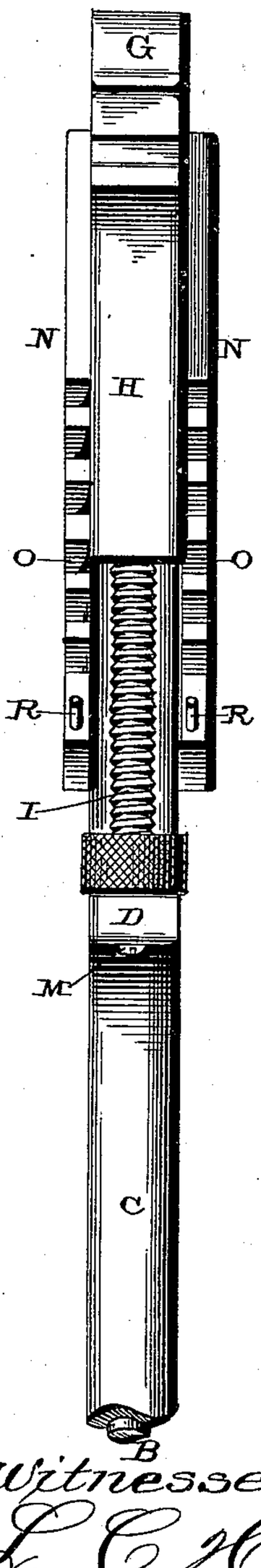


Fig. 3.

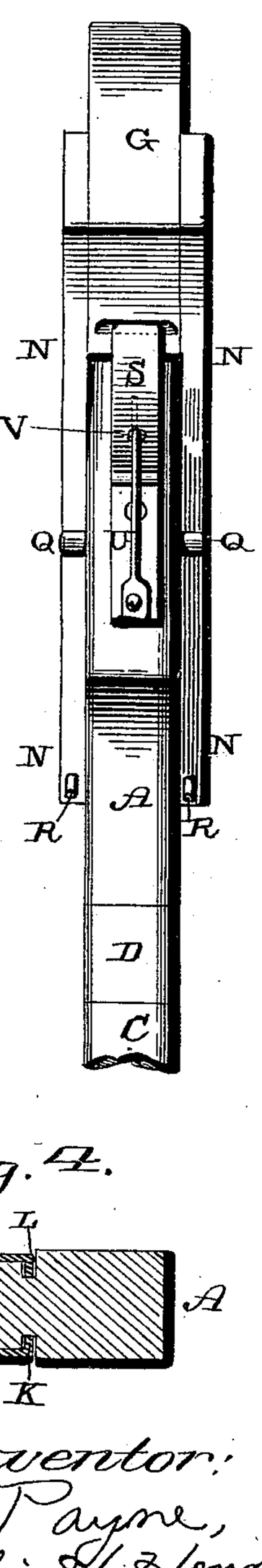
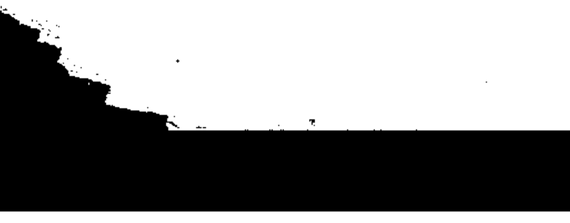


Fig. 4.



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UNITED STATES PATENT OFFICE.

CLAUDE P. PAYNE, OF SHELLMAN, GEORGIA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 551,689, dated December 17, 1895.

Application filed September 27, 1895. Serial No. 563,888. (No model.)

To all whom it may concern:

Be it known that I, CLAUDE P. PAYNE, a citizen of the United States, residing at Shellman, in the county of Randolph and State of Georgia, have invented certain new and useful Improvements in Pipe-Wrenches; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in wrenches; and it consists in a monkey-wrench having pivoted thereto a jaw which is adapted to engage with pipes and round rods, and which jaw is a permanent attachment to the wrench, but which can be moved back out of the way when not needed.

It also consists in a monkey-wrench provided with a sliding jaw, and a screw for operating the jaw, both the jaw and the screw being detachable, combined with a movable and adjustable jaw which is pivoted upon the monkey-wrench, and a spring for holding the jaw normally in contact with the stationary jaw, as will be more fully described hereinafter.

The objects of my invention are to provide the outer jaw of the wrench with a rounding ratcheted surface, and to pivot upon the monkey-wrench an adjustable jaw which is adapted for use in connection with pipes and other round objects; to make the movable jaw of the monkey-wrench and the operating-screw detachable from the wrench, so that the remaining portion of the monkey-wrench and the pivoted adjustable jaw connected thereto are adapted for use entirely as a pipe-wrench, and to add as an attachment to a monkey-wrench a jaw that is adapted for use only in connection with pipes and rods, and which jaw is provided with a spring of its own that will normally hold the jaw in contact with the object being operated upon, but which is adapted to be turned back out of the way, so that the pivoted jaw can be turned into any desired position.

In the accompanying drawings, Figure 1 represents a side elevation of a wrench which embodies my invention complete, the pivoted adjustable jaw being shown in one position in solid lines and in another in dotted lines. Figs. 2 and 3 are edge views of the wrench. Fig. 4 is a horizontal section taken through the monkey-wrench upon the line X X of Fig. 1.

A represents the stationary jaw of the monkey-wrench, which is provided at its inner end with the shank B, upon which the handle C and the stop D are secured by means of the nut E. The outer corner of the jaw A is rounded away and provided with ratchet-teeth F, so as to be used in connection with the jaw G as a pipe-wrench.

Sliding upon the jaw A is the movable jaw H, which is operated by the screw I, and which jaw is provided with the plates J, which have their inner ends turned at right angles so as to form guides K, which catch in the grooves L in the sides of the jaw A. (Passing the stop D is a screw, nail, or other securing device M, which device M has its inner end centering in the outer end of the screw I, as shown in dotted lines in Fig. 1.) When it is desired to remove the jaw H and the screw I, so as to leave the remaining portion of the wrench adapted for pipework only, the device M is removed, and then by removing the nut E from the end of the shank B, and then removing the handle and the stop, the jaw and screw can be removed without any difficulty.

Pivoted upon the jaw A is the jaw G, which is adapted for pipework only, and which jaw has two arms or projections, as shown in Figs. 2 and 3, and which arms or projections N straddle the jaw A, the sliding jaw H, and the screw I, as shown. Both of these arms or projections M are provided with a series of notches O in their upper edges, and which notches enable the arms or projections N to catch over the studs or projections P, which extend at right angles from opposite sides of the jaw A. Each of these notches upon one or both of the arms or projections is provided with a number of figures, which show the size of the pipe or rod which is to be operated upon, and thus enable the jaw G to be quickly adjusted into position without any experimenting. The inner surface of this jaw is perfectly smooth and is provided with an angle or elbow, so that a pipe or rod will

slip down into the position shown in dotted lines in Fig. 1, and thus enable the two jaws F G to take such a hold upon the pipe or rod that the wrench cannot possibly slip upon it. Also projecting from opposite sides of the jaw A are the two projections Q, which are just near enough to the two lugs P to allow the arms N to move freely back and forth between the two projections P Q to allow the jaw G to be freely adjusted. Also projecting from the inner end S of the arms N are the two stops R, which, by catching against the projections P P when the jaw G is moved outward to its greatest extent, prevent the jaw from becoming displaced or separated from the jaw A.

The jaw G is held normally pressed forward toward the jaw A by means of the pivoted perforated catch S, which has its outer free end to catch in a notch T in the lower inner corner of the jaw G. Also secured to the jaw A is the spring U, which has its free end to pass through the perforation V in the catch, both for the purpose of keeping the catch pressed against the jaw and to allow the catch to be turned backward outward out of the way, as shown in dotted lines in Fig. 1, when the jaw G is moved outward beyond the first notches at or near the center of the arms N. This spring-actuated catch serves to hold the jaw G in the position shown in solid lines in Fig. 1 when the jaw G is not to be brought into use. This jaw G will preferably remain in the position shown in solid lines in Fig. 1 when the monkey-wrench is being used for tightening nuts and other such purposes; but when the jaw G is to be brought into use for operating upon pipes and round rods it will be moved outward, as shown in dotted lines. Should it be desired to use the wrench entirely upon pipes and round rods for a time, the jaw H and screw I are removed, as already described, and thus the wrench is put in its lightest possible form. For ordinary every-day use the jaw G will remain in the position as shown in solid lines in Fig. 1.

Having thus described my invention, I claim—

1. A monkey wrench, and a pivoted extensible jaw connected thereto, combined with a pivoted catch which engages with the jaw, and a spring applied to the catch, the catch being adapted to be turned back out of the way, substantially as described.

2. The stationary jaw, provided with a shank and longitudinal grooves, combined with the removable stop, a fastening device which passes through the stop, the screw, and the sliding jaw, provided with means for engaging the slots, whereby the jaw and the screw may be removed when the wrench is to be applied to pipes, substantially as specified.

3. A monkey wrench having the rear corner of its stationary jaw rounded and serrated, combined with a jaw N designed to straddle the shank of one of the jaws of the monkey wrench, a series of teeth on one edge of the said jaw N, and the lugs Q and P mounted on the stationary jaw, and between which the shank portion having the said teeth or notches, is designed to work, substantially as shown and described.

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

CLAUDE P. PAYNE.

Witnesses:

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