

No. 854,949.

PATENTED MAY 28, 1907.

G. K. HOLBINE.
WRENCH.

APPLICATION FILED SEPT. 24, 1906.

Fig. 1

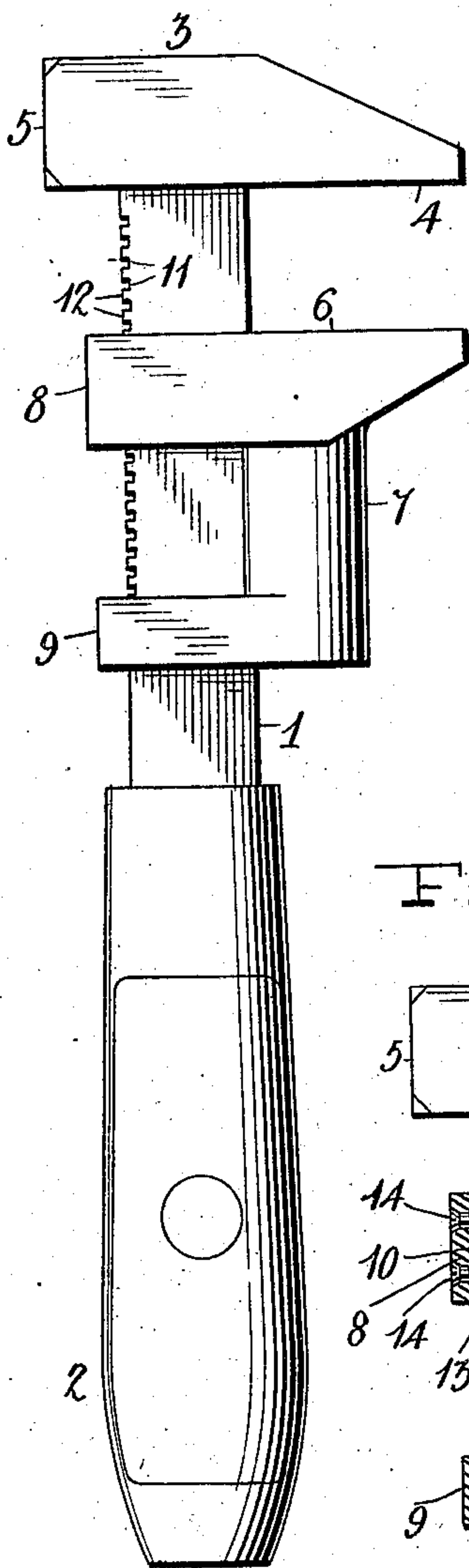


FIG. 2

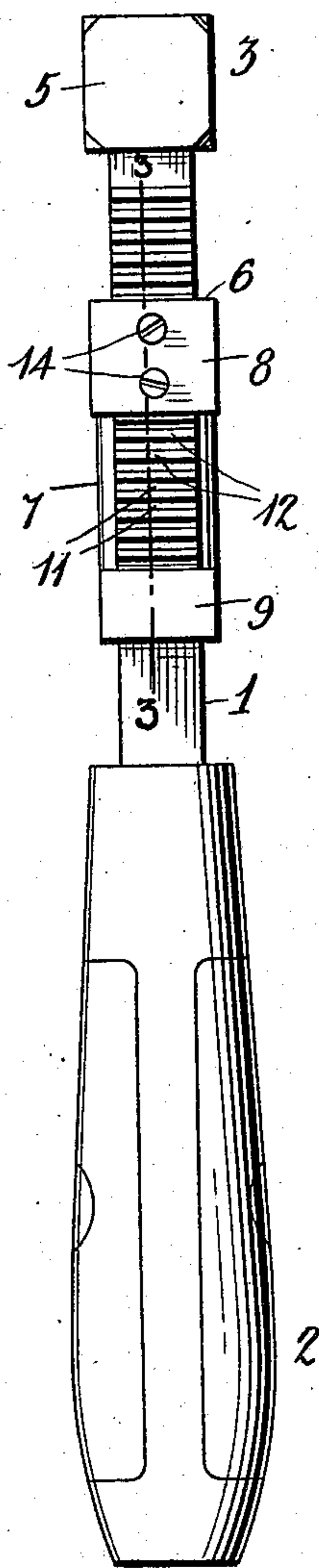
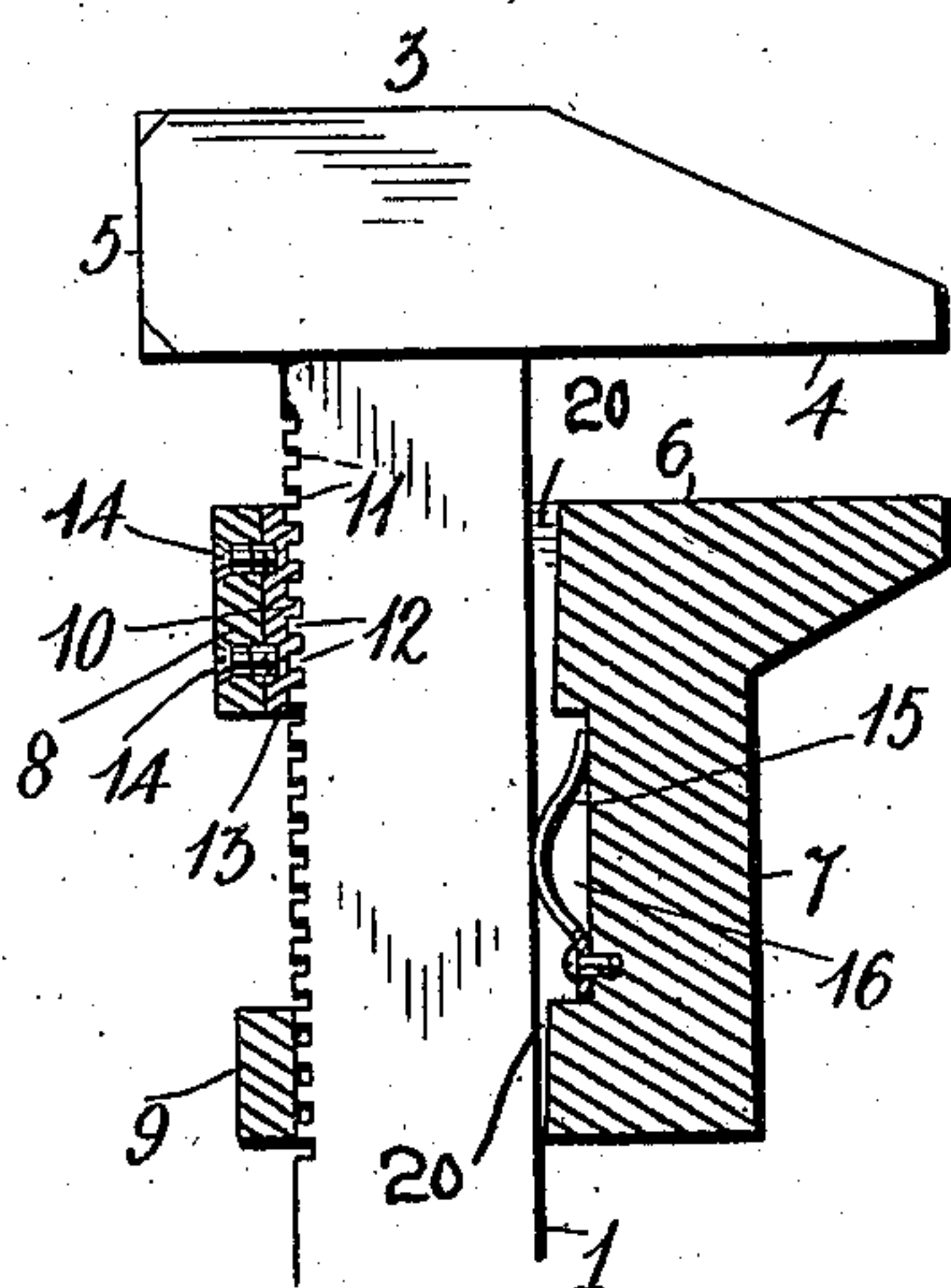


FIG. 3



Witnesses
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GOTTLIEB K. HOLBINE, OF EUSTIS, NEBRASKA.

WRENCH.

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Specification of Letters Patent.

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Application filed September 24, 1906. Serial No. 335,919.

To all whom it may concern:

Be it known that I, GOTTLIEB K. HOLBINE, a citizen of the United States, residing at Eustis, in the county of Frontier and State of Nebraska, have invented certain new and useful Improvements in 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.

This invention relates to improvements in wrenches, and it consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The object of the invention is to provide a device of this character, which will be simple, strong and durable, and of comparatively inexpensive construction, and in which its movable jaw may be quickly and easily adjusted.

The above and other objects, which will appear as the nature of the invention is better understood, are accomplished by means of the construction illustrated in the accompanying drawings, in which,—

Figure 1 is a side elevation of the improved wrench; Fig. 2 is an edge view of the same; and Fig. 3 is a detail longitudinal section, taken on the plane indicated by the line 3—3 in Fig. 2.

Referring to the drawings by numeral, 1 denotes the body or shank of the wrench, which has at one of its ends a handle 2 of any suitable form and construction, and at its opposite or outer end a transverse head 3, one end of which forms a stationary jaw 4 for the wrench. This head 3 is of greater width than the shank, which latter is preferably rectangular in cross section; and the opposite end 5 of said head projects beyond the shank and is flattened to permit it to be used as a hammer.

Coacting with the stationary jaw 4 of the wrench is a movable jaw 6, which is adapted to slide upon the shank 1. The jaw 6 is formed at one end of a suitable block 7, which is provided at its ends with upper and lower looped-shaped portions 8, 9, spaced apart and through which the shank 1 projects and slides. The lower loop 9 is slightly larger than the shank and the upper loop 8 is considerably larger than the same, so that the block 7 and its jaw 6 has a limited lateral swinging movement upon the shank. The walls 20 of the said loops, which are opposed to the inner edge of the shank are inclined

and diverge from the said shank toward the fixed jaw to permit the said block 7 to be moved angularly with reference to the shank. In the outer end of the loop 8 are one or more teeth or pawls 10, which are adapted to enter the grooves or recesses 11, formed between transversely-extending ribs 12 upon one edge of the shank 1. These ribs 12 are preferably formed by grooving the shank transversely and they provide a rack with which the teeth 10 may engage for the purpose of locking the sliding jaw 6 against movement upon the shank. Said ribs or teeth 12 and also the teeth 10 are preferably square or rectangular in cross section, as shown, and the teeth 10 are preferably formed upon a removable plate 13, which is secured by rivets, screws or the like 14, in the outer end of the loop 8, as seen in Fig. 3. The teeth 10 are forced normally into engagement with the rack 12, by a curved spring 15, which is arranged in a cavity or recess 16, formed in the inner face of the block 7 at a point between and spaced from the ends thereof; said spring being adapted to bear against the edge of the shank 1, opposite that in which the rack teeth are formed. One end of the spring is fastened to the block by a stud and the other end thereof is free.

In operation, when it is desired to adjust the movable jaw toward or from the stationary jaw, the former is pushed inwardly against the tension of the spring 15 and moved angularly, so as to disengage the teeth 10 from the rack 12. When thus disengaged, the block 7 and its jaw 6 may be moved longitudinally upon the shank 1 in either direction. As soon as the movable jaw is released, the spring forces it outwardly and causes the teeth 10 to engage the rack 12 and lock it against longitudinal movement.

Having thus described my invention, what I claim as new, and desire to secure by Letters-Patent, is,—

The herein-described wrench comprising a shank having a fixed jaw at its outer end, a handle at its inner end and rack teeth on its outer edge, a sliding block on said shank having a jaw at its outer end, provided at its ends with loops through which the shank extends, and a longitudinal recess in its inner face at a point between its ends and spaced between its sides, the loop at the outer end of the block being larger than that at the inner end thereof and provided in its face which opposes the outer edge of the shank with rack

teeth to engage those of the shank, the faces
of the said loops opposed to the inner edge
of the shank being inclined and diverging
from said shank toward its outer end to per-
5 mit said block to be turned angularly to dis-
engage its teeth from those of the shank, and
a bowed spring in the recess in the block hav-
ing one end secured to the block, the other
end free to play longitudinally in the bottom
10 of the recess and having its intermediate
portion bearing against one edge of the

shank, the sides of the block forming the side
walls of the recess serving to conceal said
spring.

In testimony whereof I have hereunto set 15
my hand in presence of two subscribing wit-
nesses.

GOTTLIEB K. HOLBINE.

Witnesses:

WM. BOPP,
JEREMIAH WAGNER.