

(No Model.)

C. KABISCH.

WRENCH.

No. 331,974.

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Fig. 1.

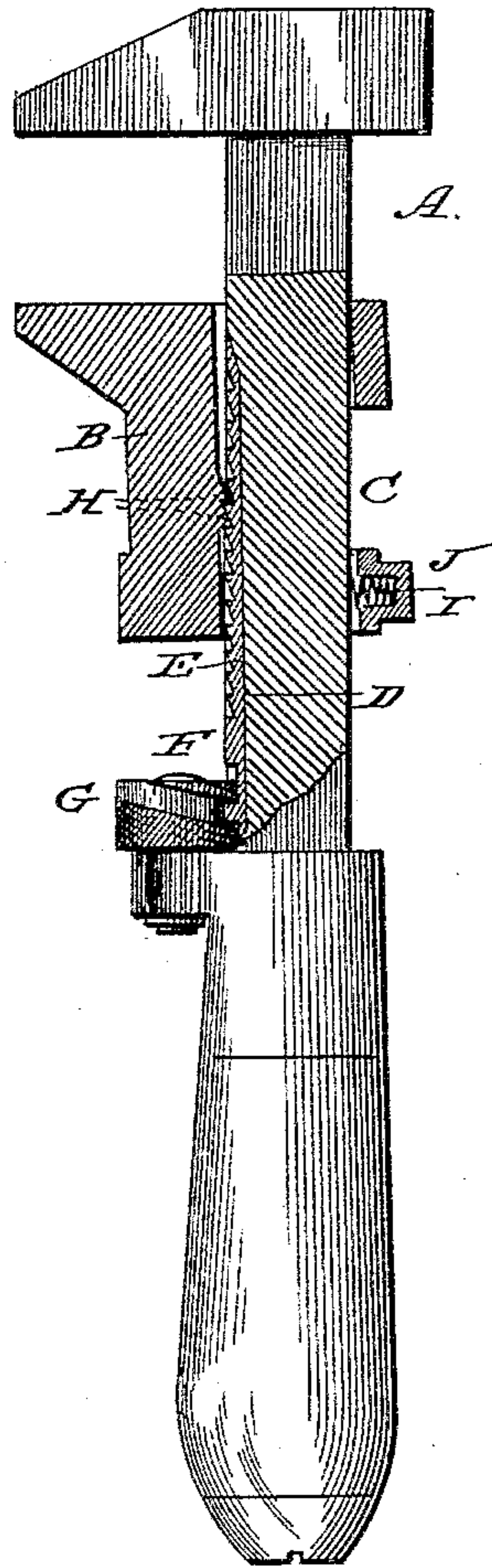
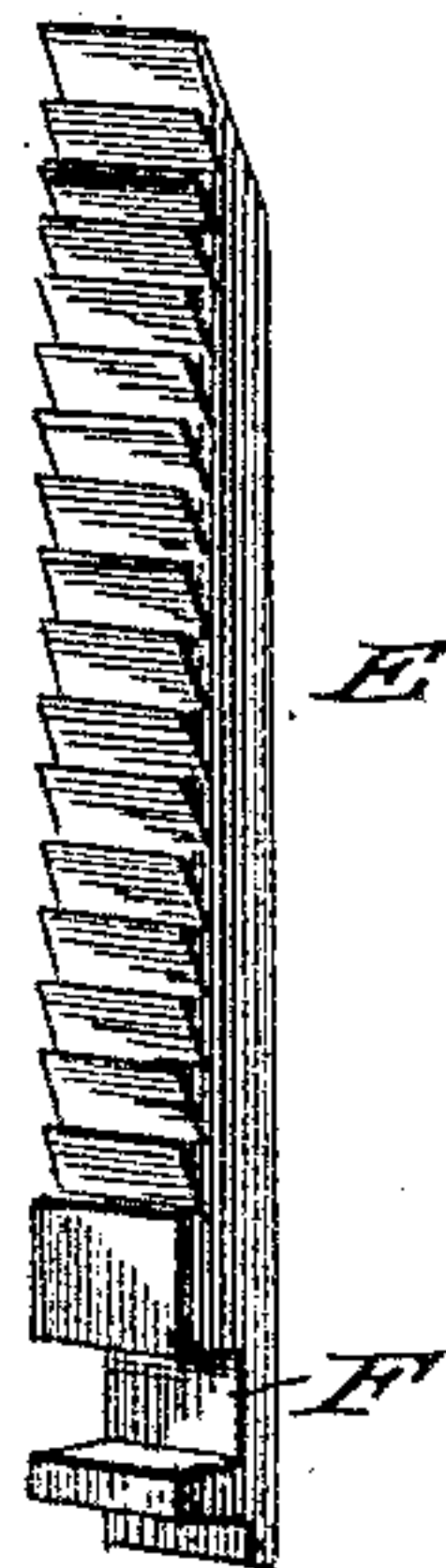


Fig. 2.



WITNESSES:

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SPECIFICATION forming part of Letters Patent No. 331,974, dated December 8, 1885.

Application filed December 13, 1884. Serial No. 150,280. (No model.)

To all whom it may concern:

Be it known that I, CARL KABISCH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful
5 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 pertains to make and use it, reference being
10 had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in sliding-jaw wrenches; and it consists in the combination, with a wrench having a sliding
15 jaw and grooved or recessed bar, of a sliding rack which has its upper end beveled and with which the jaw engages, and a means for moving both rack and jaw after the jaw has been adjusted by hand, as will be more fully
20 described hereinafter.

The object of my invention is to provide a wrench with a means for tightening the jaw upon the object to which it is applied after the jaw has been moved by hand, so as to
25 bring it in contact with the object and thus prevent the jaw from slipping on the object and bruising its corners or edges, and thus spoiling the finish and beauty of the workmanship.

30 Figure 1 is a side elevation of a wrench embodying my invention, partly in section. Fig. 2 is a detail view of the sliding rack.

A represents a wrench of ordinary construction having a sliding jaw, B. The inner edge of the bar C of the wrench, instead
35 of having a rack formed upon it in the usual manner, here has a longitudinal groove, D, formed in it, which groove has its upper end made inclined, as shown, for the purpose of
40 acting as a wedge upon the sliding rack E which is placed in the groove. This rack E, fits snugly in the groove and has an endwise movement therein, and has its upper end beveled away, so as to correspond to the bevel
45 at the upper end of the groove. In the lower end of the rack is made a transverse groove, F, in which the thread of the adjusting-screw G catches, for the purpose of moving the rack endwise when the screw is turned. Inside of

the sliding jaw are formed a number of teeth, 50 H, which are made to engage with the teeth of the rack by means of a suitable spring, I, which is placed inside of the lower end of the jaw. By pressing against the projection J on the lower outside corner of the jaw the
55 jaw is disengaged from the rack, and can then be moved freely back and forth in the usual manner.

One great trouble with sliding jaw wrenches is that after the jaw has been moved up in
60 contact with the object by the hand the jaw does not bite into the object with sufficient force to prevent it from slipping off from the object and thus bruising its corners or edges, which is very objectionable where there is
65 fine workmanship. To prevent this slipping, the sliding jaw and its adjusting-screw is provided. After the jaw is moved by hand up against the object, the screw is moved or
70 turned for the purpose of forcing the rack upward in its groove. As the jaw engages with this rack and moves with it, it will readily be seen that the jaw can be forced against the object with any desired degree of force,
75 and thus compel it to bite into the object in the same manner as in the old screw-jaw wrench.

By the construction here shown there is combined in one wrench all of the advantages
80 of the sliding-jaw and a screw wrench.

I am aware that a sliding ratchet-rod has heretofore been pivoted to one half of the handle, so as to move when said half of the handle is closed or opened, and that a locking-cam has been used in connection with said
85 device, for the purpose of preventing the handle from opening when it is not desired to bring the sliding ratchet-rod into use. I am also aware that a sliding ratchet-rod has been used and moved by revolving a portion of the
90 handle, and these I disclaim. My invention differs from these devices in placing the sliding ratchet-rod in a groove and beveling the ends of both rack and groove, so that when the ratchet-rod is moved endwise it is forced
95 outward, so as to lock the jaw in place.

Having thus described my invention, I claim—

In a sliding-jaw wrench, the combination of the recessed bar C, the rack D, which is placed in the recess in the bar and which has its upper end beveled to correspond to the shape of the upper end of the recess, the sliding jaw, and a cam for moving the rack endwise, so as to cause it to engage with the teeth on the inner side of the jaw, substantially as shown and described.

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

CARL KABISCH.

Witnesses:

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