

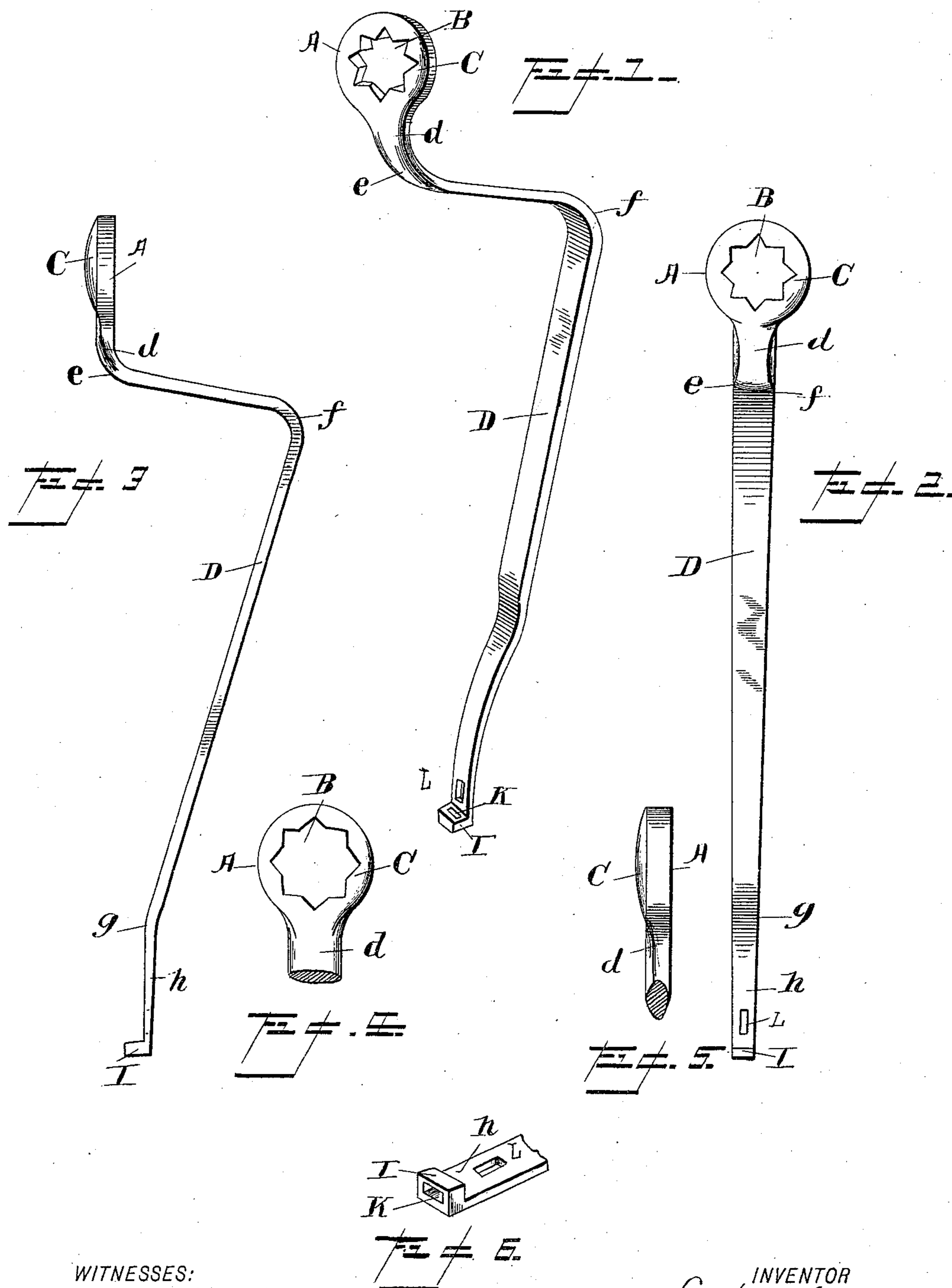
(No Model.)

E. W. OAKLEY.

WRENCH AND STRAIGHTENER FOR THRASHING MACHINE TEETH.

No. 518,328.

Patented Apr. 17, 1894.



WITNESSES:

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EDWARD W. OAKLEY, OF CHATFIELD, MINNESOTA.

WRENCH AND STRAIGHTENER FOR THRASHING-MACHINE TEETH.

SPECIFICATION forming part of Letters Patent No. 518,328, dated April 17, 1894.

Application filed December 12, 1893. Serial No. 493,455. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. OAKLEY, residing at Chatfield, in the county of Fillmore and State of Minnesota, have invented certain
5 new and useful Improvements in Wrenches and Straighteners for Thrashing-Machine Teeth, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to tools for setting, tightening, and straightening the teeth of thrashing machines.

The object of the invention is to produce a tool which may be conveniently applied as a
15 wrench to turn the nuts on thrashing machine teeth, and also to straighten teeth in the cylinder or concave which may have become bent or twisted.

Figure 1 is a perspective view of my improved tool. Fig. 2 is a back or top view of the same. Fig. 3 is an edge view; Fig. 4 a
20 face view of the nut clasp jaw and part of its shank. Fig. 5 is an edge view of same. Fig. 6 is a broken perspective of tooth straightening end.

Thrashing machine cylinders are often composed of a skeleton frame work, having longitudinal bars, in which are polygonal holes, in which the polygonal shanks of the teeth
30 are held. The shanks of the teeth terminate in screw threaded portions, extending through the bars of the cylinder, and nuts on these threaded shanks, inside the cylinder, hold the teeth in place. The wrench must be passed
35 between the bars of the cylinder to reach and turn the nuts, at the central parts of the cylinder. This may be readily done with the tool about to be described.

The wrench head, A, is preferably a socket
40 which embraces the nut on all sides. I have shown a wrench head with an opening, B, having eight corners or notches. These are adapted to fit over the corners of a square nut, and the head is readily adjusted and
45 changed in its position relatively to the nut. For a hexagonal nut the shape of the opening in the wrench head might be changed. The face, C, of the wrench head, surrounding the opening B, is made convex, so that the head
50 may embrace the nut close to the bar of the cylinder, and also so that the hold on the nut may be maintained notwithstanding a slight

rocking of the handle of the wrench. The handle, D, extends from one side of the wrench head, and for a little distance this handle is
55 about in the plane of the wrench head, and is oval or elliptic in cross section, as at *d*, so that the handle may be used as a lever to turn the nut to the greatest extent before the edge or corner thereof comes in contact with the
60 bars of the cylinder. At a little distance from the wrench head the handle makes a sharp bend, as at *e*, and after extending in a direction nearly at a right angle to the head, A, for a few inches, the handle makes another
65 sharp turn, as at *f*, but this angle is preferably a little greater than the angle at *e*, so that the handle in its extension again approaches the plane of the wrench head, as plainly shown in Fig. 3, the handle thus hav-
70 ing a return bend of goose neck, about as shown in Fig. 3. When the handle approximates the plane of the head, it is preferably again slightly bent, as at *g*, so that the further continuation of the handle is about in the
75 plane of the head, as at *h*, Fig. 2. The end of the wrench handle turns at about a right angle, as at *i*. This extended portion has a rectangular mortise K, close to the main bar. This mortise can be passed over the outer end
80 of a tooth, and the leverage of the handle exerted on the tooth to straighten the same. Near the outer end of the handle there is formed a rectangular mortise L, in the part, *h*, of the handle. This mortise can be passed
85 over the tooth, and the leverage of the handle used to twist on the tooth so as to straighten by torsional strain any tooth which may have become bent.

From the foregoing description it is be-
90 lieved the construction and manner of using this tool will be apparent. The tool is preferably integral.

It will of course be understood that the material of which the tool is made will be a
95 metal of adequate strength; that the size will be in proportion to the necessities of the case, and that changes may be made within reasonable limits without departing from the general features of the invention.

I claim—

1. A thrashing machine tooth wrench having a wrench head at one end to fit over the nut of a tooth, a goose-neck handle, a rectan-
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gular mortise near the end opposite the wrench head, and a terminal portion about at right angles to the wrench head which is also provided with a rectangular mortise, all substantially as shown and described.

5 2. The wrench for thrashing machine teeth having an opening with eight corners or notches and a convex face, an oval stem integral with said head, and a goose-neck handle

connected to said stem, all substantially as is described.

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

EDWARD W. OAKLEY.

Witnesses:

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E. M. EDWARDS.