

No. 626,381.

Patented June 6, 1899.

D. M. HUMISTON.  
COMBINATION TOOL.

(Application filed Oct. 20, 1898.)

(No Model.)

Fig. 1.

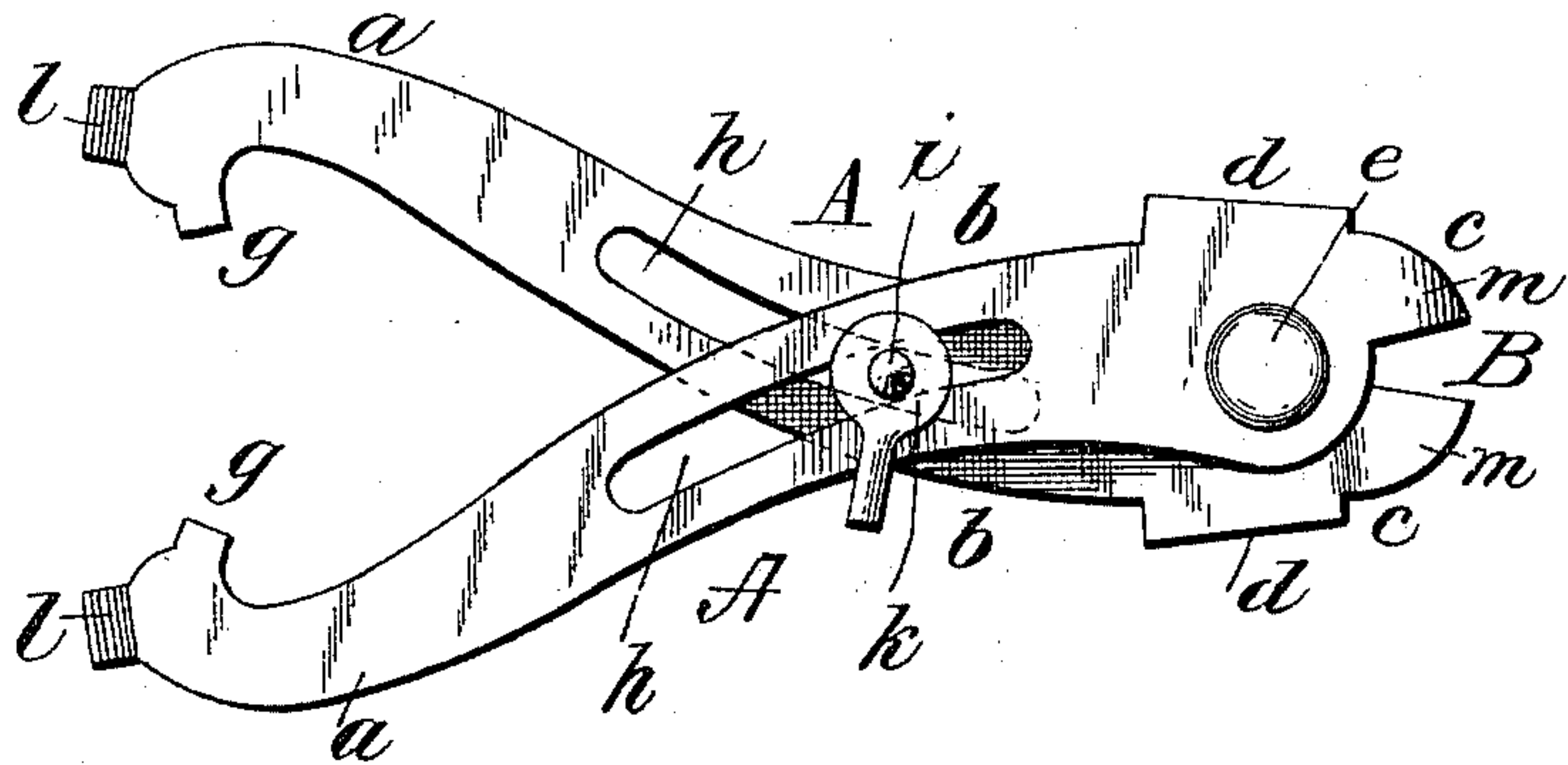


Fig. 2.

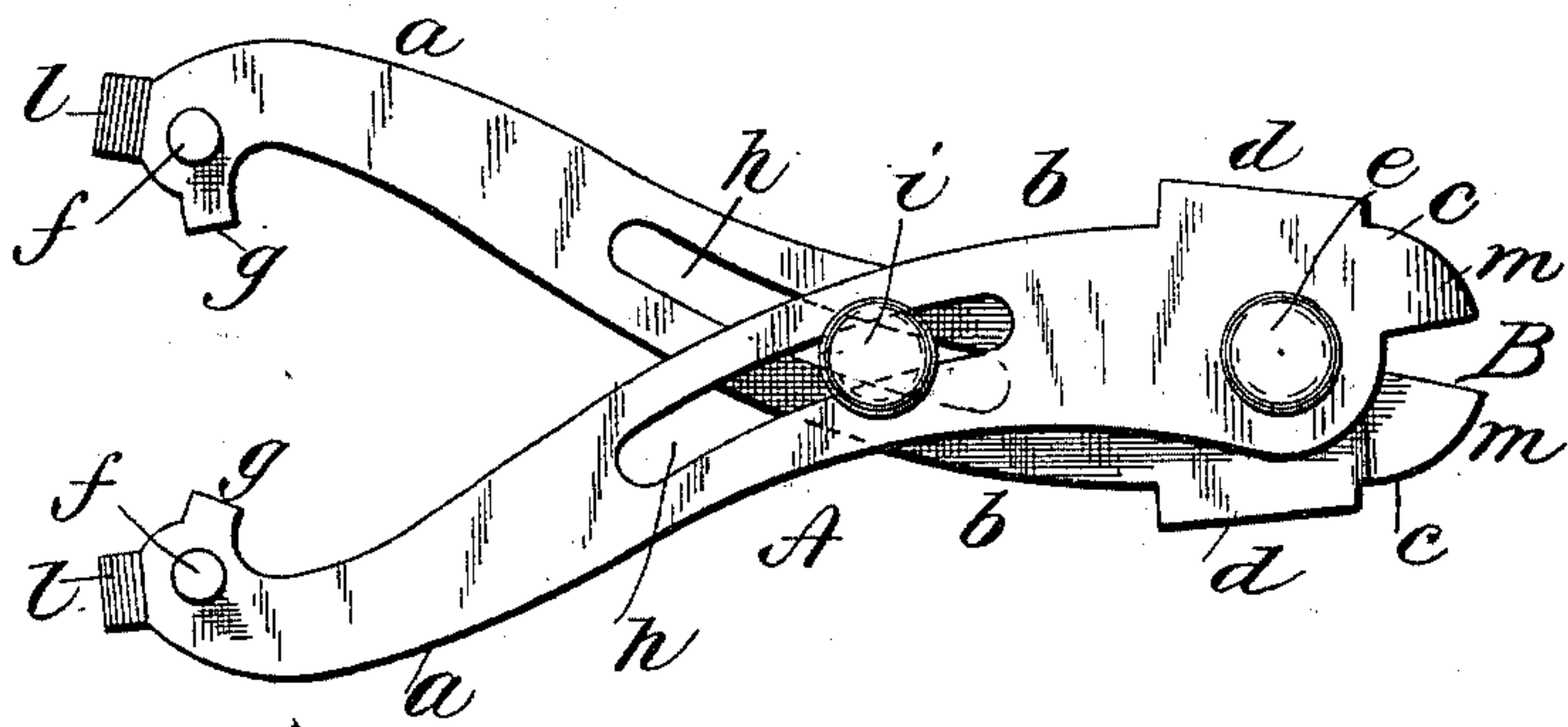
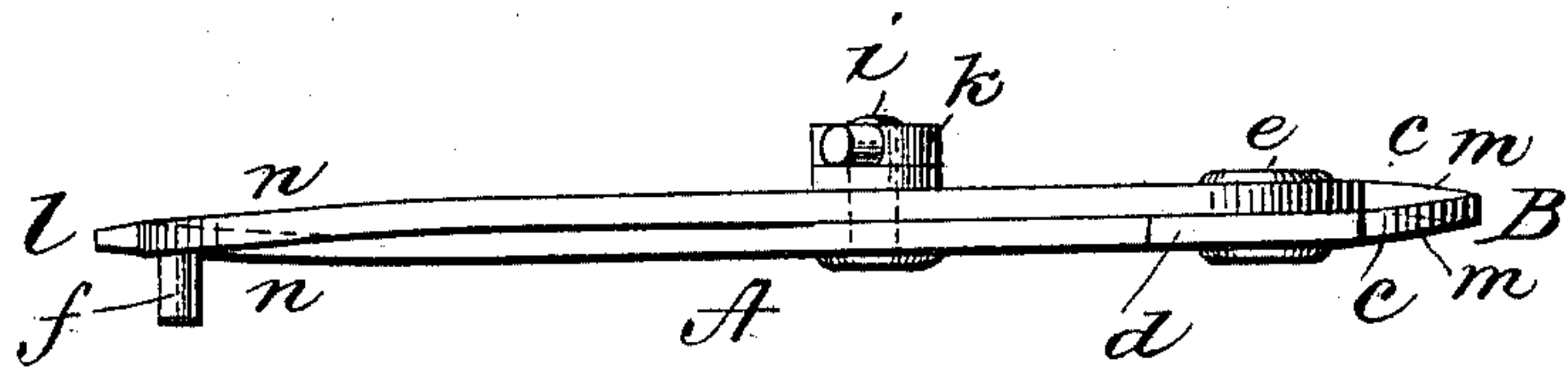


Fig. 3.



Witnesses  
Frank L. Ourand.  
W. Parker Reinohl.

Inventor  
Dawson M. Humiston.  
By D. C. Reinohl  
Attorney

# UNITED STATES PATENT OFFICE.

DAWSON M. HUMISTON, OF PERU, ILLINOIS.

## COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 626,381, dated June 6, 1899.

Application filed October 20, 1898. Serial No. 694,066. (No model.)

*To all whom it may concern:*

Be it known that I, DAWSON M. HUMISTON, a citizen of the United States, residing at Peru, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Combination-Tools; 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.

My invention relates to combination-tools, has especial reference to bicycle-tools, and consists in certain improvements in construction whereby a spanner for removing the cones of the crank-axle bearing is formed at one end and a wrench for adjusting the spokes of the wheel and for other purposes and a hammer or heavy screw-driver blade are formed at the opposite end, as will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 is a side elevation of my invention; Fig. 2, a like view showing the opposite side, and Fig. 3 a top plan view.

Reference being had to the drawings and the letters thereon, A A indicate the two members of the tool, which are the counterpart of each other and in which the shank of each is curved in opposite directions at *a* and *b*, provided with a jaw *c* and a head *d*, projecting approximately at a right angle to each other at one end, the jaws forming a wrench or pliers B and the heads forming hammers, or they may be used as screw-driver blades. The two members are pivotally connected together by a rivet *e*, adjacent to the jaws *c*. The opposite end of each member is provided with a lateral projection or pin *f* and an inward projection *g*, the two being in planes at a right angle to each other and form span-

ners, the side projections *f* for engaging the holes in the face of bicycle-cones, and the projections *g* for engaging slots or recesses in the periphery of the head of the cones.

In each member A is a longitudinal slot *h*, and in said slots is a bolt *i* and a nut *k* for clamping the two members firmly and securely together in any desired position or the spanner or the wrench.

On the end of the spanner part of each member is a screw-driver *l*.

The jaws *c* are bent laterally or toward each other at *m* to overlap, and the opposite end of each member is also bent in like manner at *n* to bring each pair of spanner projections *f* and *g* in the same plane, as shown in Fig. 3. This is done to avoid having to recess the members on opposite sides and enables the members to be stamped out of sheet metal of proper thickness by the use of suitable dies.

The tool forms a light compact implement, which may be readily carried in the pocket.

Having thus fully described my invention, what I claim is—

1. A tool having two members pivotally connected, bent at their adjacent ends into substantially the same plane and at their opposite ends provided respectively with jaws and spanner projections.

2. A tool having two members pivotally connected, bent at their adjacent ends into substantially the same plane and at their opposite ends provided respectively with jaws and spanner projections, and means for clamping the members in fixed angular relation.

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

DAWSON M. HUMISTON..

Witnesses:

W. M. CASTLE,

B. D. BREWSTER.