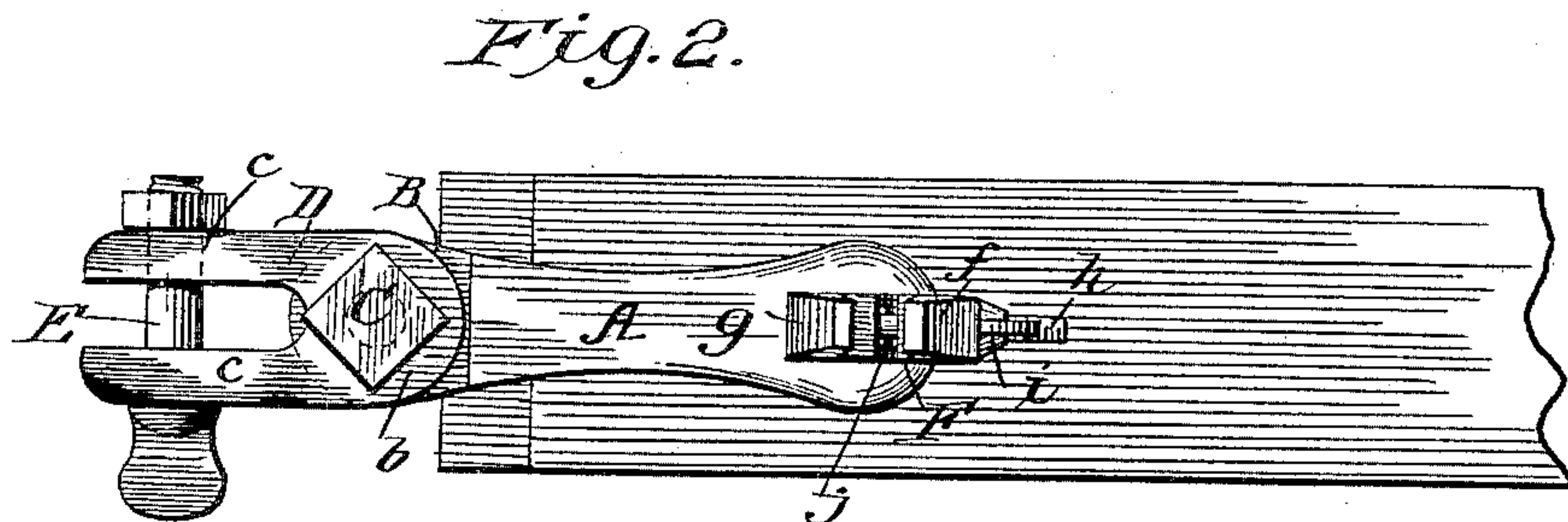
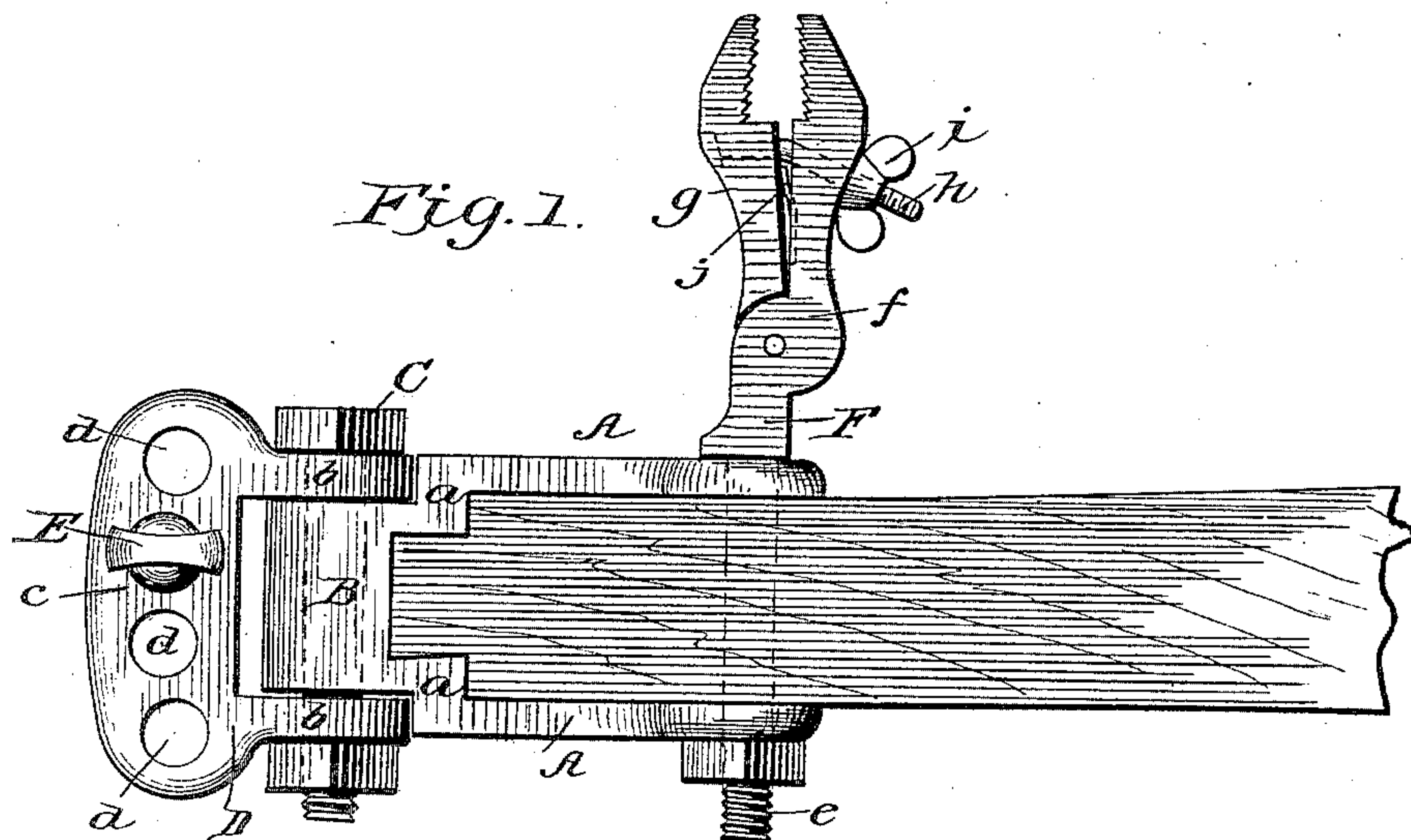


(No Model.)

G. EVANS.
COMBINED CLEVIS AND WRENCH BOLT.

No. 442,479.

Patented Dec. 9, 1890.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE EVANS, OF CLARKSDALE, MISSISSIPPI.

COMBINED CLEVIS AND WRENCH-BOLT.

SPECIFICATION forming part of Letters Patent No. 442,479, dated December 9, 1890.

Application filed July 22, 1890. Serial No. 359,573. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EVANS, of Clarksdale, in the county of Coahoma and State of Mississippi, have invented a new and
5 useful Improvement in a Combined Clevis and Wrench-Bolt, of which the following is a specification.

My invention is in the nature of a combined clevis for plows and a wrench-bolt adapted either to secure the clevis to the
10 plow-beam or be used independently as a wrench; and it consists in the peculiar construction and arrangement of parts, which I will now proceed to describe with reference
15 to the drawings, in which —

Figure 1 is a side view, and Fig. 2 a plan view.

A A B represent the portion of the clevis that connects with the end of the plow-beam.
20 The bars A A fit upon the top and bottom of the end of the beam and are formed in one piece with the knuckle B, which is perforated with a vertical hole for the vertical pivot-bolt C. The bars A A have right-angular bends *a*
25 *a* at the points where they join onto the knuckle, so that the knuckle is of less length than the outside transverse measurement of the bars A A. Upon the top and bottom of the knuckle B there lay the perforated ears
30 *b b* of the swiveling coupling D, which is jointed to the knuckle B by the pivot-bolt C. The coupling D is made with two vertical lips or jaws *c c* with a vertical channel or mouth between them, and these lips are provided
35 with a vertical series of holes *d*, through which a short horizontal bolt E passes to form a connection for the draft-hook of the single-tree, which drops into the channel-way between the two lips *c c*. By this series of holes
40 the draft-connection may be raised or lowered by placing bolt E higher or lower in the series of holes.

In fitting the clevis to the plow-beam the end of the latter is notched to enter the space
45 between the bends *a a*, and is also bored vertically in line with perforations in the rear ends of bars A A. Through these holes in the bars and in the beam is then slipped the wrench-bolt F, which consists of a stem *e*,
50 screw-threaded and provided with a nut at

its lower end, and having its upper end fashioned into a rigid wrench-jaw *f*, to which is jointed a movable jaw *g*, a curved screw-stem
h and butterfly-nut *i* serving to bring the two jaws closer together, while a spring *j* be-
55 tween the jaws serves to separate them. This wrench-bolt, it will be seen, serves not only to secure the clevis, but it serves also a variety of useful purposes, being adapted to various sizes of nuts as a wrench, and acting also by
60 reason of the screw-stem and nut *h* and *i* as a vise. When used as a vise the shoulder on the bolt above the plow-beam and the screw-nut on the lower end cause it to be tightly
65 clamped to the clevis and plow-beam, which thus serve as the supporting-frame for the vise securing a coaction or co-ordinate relation between these parts and a double function for the bolt. The jaws of the wrench may also
70 be roughened to serve the purpose of a pipe-tongs.

My improved clevis dispenses with the lapping and keeps the singletree up higher from the ground, making it less liable for the trace-chains to get under the horses' feet in turning
75 and rendering the draft easier.

Having thus described my invention, what I claim as new is—

1. The combination of bars A A, having right-angular bend at *a* and formed in one
80 piece with a knuckle B of reduced transverse width, the coupling D, with perforated ears *b b*, and vertical lips or jaws having rows of holes, a vertical pivot-bolt connecting the coupling D and the knuckle, and the horizontal draft-
85 bolt E, substantially as shown and described.

2. The combination, with the plow-clevis having bars A A, of the bolt F, having a screw-threaded lower end with clamping-nut, and having above the clevis or shoulder a sta-
90 tionary jaw *f*, and movable jaw *g*, and a screw *h* and nut *i* for adjusting the jaws toward each other, the said devices serving the functions of a clevis, bolt-connection, an adjustable wrench, and a vise, substantially as shown
95 and described.

GEORGE EVANS.

Witnesses:

AL. JACKMAN,
W. D. CUTRER.