

F. E. KOHLER.
CRANK FOR HAY TEDDERS.

No. 366,671.

Patented July 19, 1887.

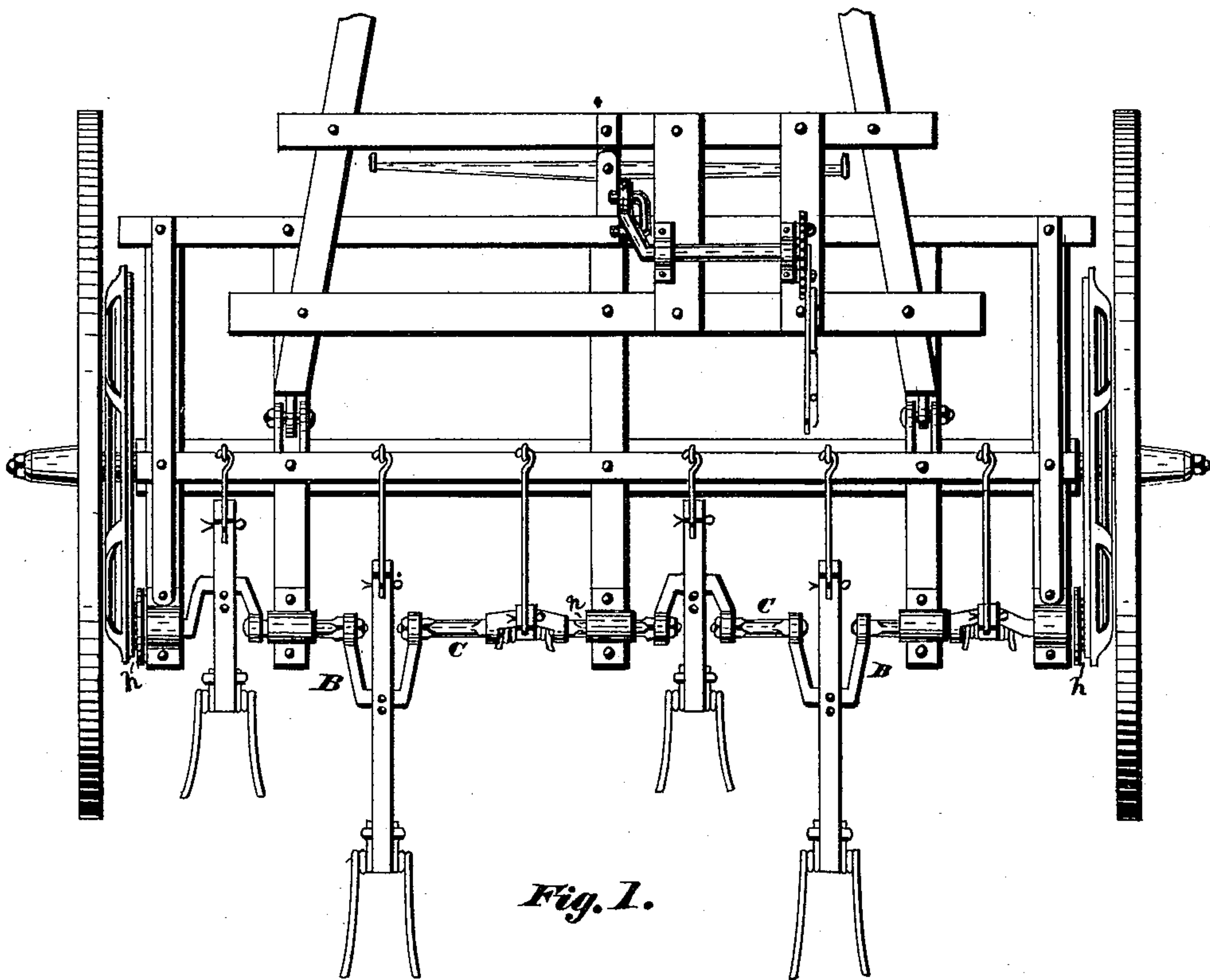


Fig. 1.

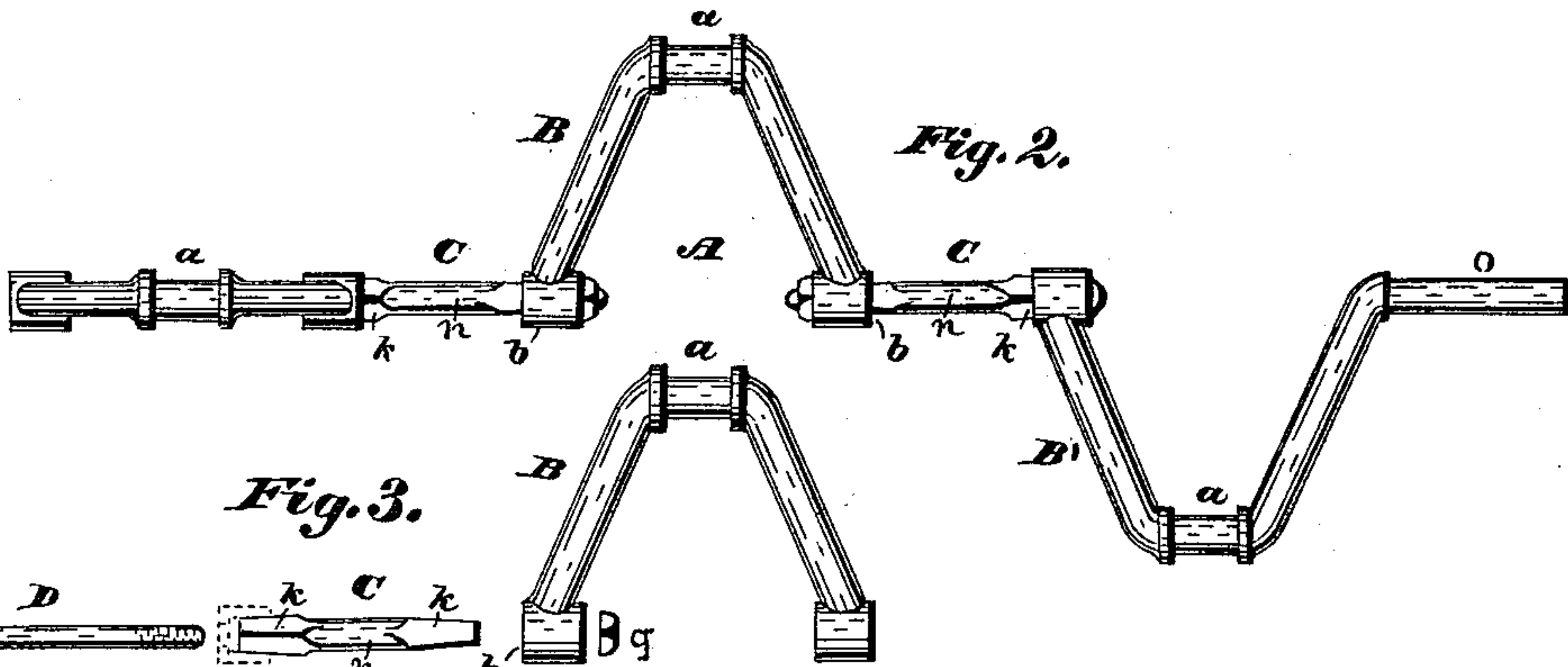
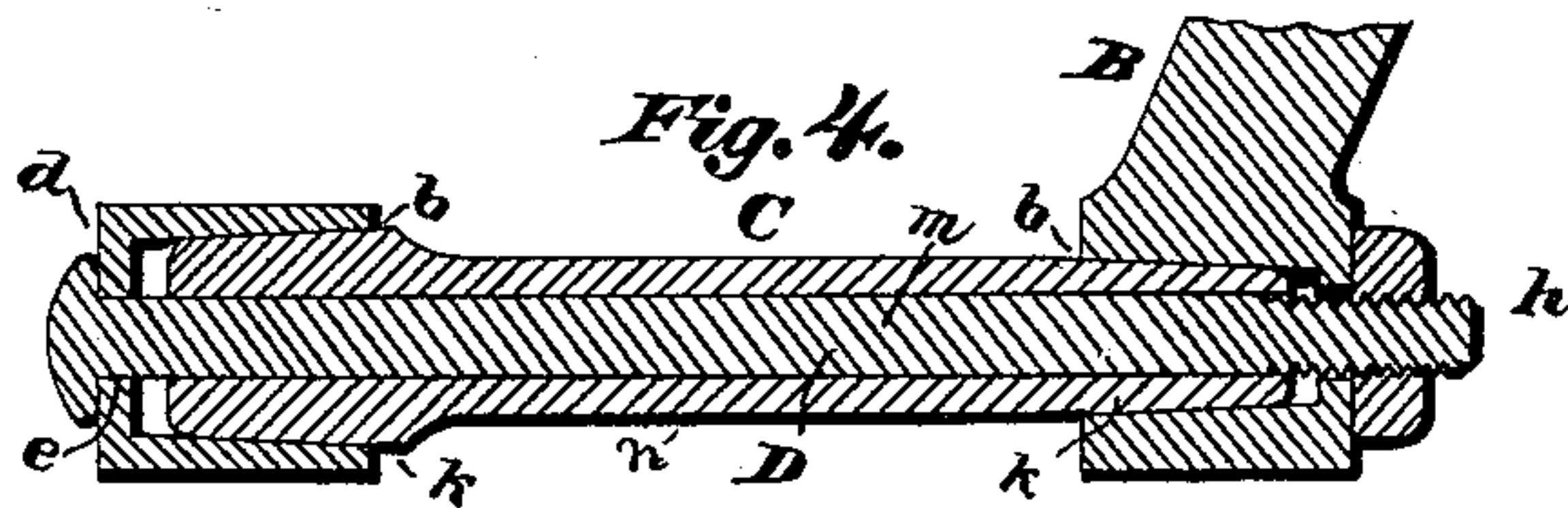


Fig. 2.

Fig. 3.

Fig. 4.



Witnesses:
Harry Grease
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by
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UNITED STATES PATENT OFFICE.

FREDERICK E. KOHLER, OF CANTON, OHIO.

CRANK FOR HAY-TEDDERS.

SPECIFICATION forming part of Letters Patent No. 366,671, dated July 19, 1887.

Application filed October 29, 1886. Serial No. 217,530. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK E. KOHLER, a citizen of the United States, and a resident of Canton, county of Stark, State of Ohio, have invented a new and useful Improvement in Cranks for Hay-Tedders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to improvements in cranks for hay-tedders; and it consists in providing a sectional cranked shaft, as hereinafter described.

My invention also consists in the detail and combination of parts as described, and set forth in the claims.

Figure 1 is an isometrical rear view of a hay-tedder embodying my improvement. Fig. 2 is an isometrical view of a section of the shaft enlarged. Fig. 3 is same view comprising a crank-section, a coupling-section, and a coupling bolt and nut. Fig. 4 is a sectional view showing the manner of coupling the parts together.

Similar letters of reference indicate corresponding parts in all of the figures of the drawings.

Letter A represents the shaft; B, the crank-sections; C, the coupling-sections; B', the end section, having a journal-section, *o*, integral therewith, hereinafter explained.

These parts may be made of any suitable metal, preferably of cast malleable iron.

The crank B is provided with a journal, *a*, and sockets *b*. The inner face of said socket is flaring or tapering and formed with angles, and may be square or of such other forms as may be preferable, each socket having one open end, the other end having a head, *d*, provided with a central perforation, *e*, for the through-bolt D. A coupling-section is provided having tapering ends *k*, formed or adapted to the sockets *b*, having such angles and so formed as to rest against the inside surface of the socket *b*, the tapering face on the end of the coupling-piece resting against the inner tapering face of the socket, the end

of the coupler not touching the bottom of the socket. The faces of the ends of the couplings may be set to alternate with each other, so as to cause the cranks to stand quartering, or in such manner as may be preferred, and the coupler C has a central longitudinal aperture, *m*, through which the bolt D may be passed, as shown, the central portion of the coupler forming a supporting-journal, *n*, for the shaft.

The end crank-section, B', has a journal-section, *o*, integral therewith for the support of the end of the shaft and rotating pinions *h h*. The manner of constructing the shaft is to place the ends *k* of the coupling-section into the socket *b* of the crank-section B B', pass the bolt through, as shown, and turn on the fastening-nut *q*, drawing the tapering surfaces of the socket and coupler together, forming a strong and durable shaft.

Having thus fully described the nature and object of my invention, what I claim, and desire to secure by Letters Patent, is—

1. A sectional crank-shaft composed of two end cranks, each provided at one extremity with a journal-section integral therewith, and at the other extremity with a socket, and the intermediate crank-sections each provided at both extremities with sockets, substantially as set forth.

2. The combination, with the crank-sections B, each made in a single piece and provided at both extremities with tapering sockets, of the coupling-sections C, having tapering ends adapted to enter the sockets, substantially as set forth.

3. The combination, with the crank-sections B, each made in a single piece and provided with tapering sockets, of the coupling-sections C, having tapering ends and a longitudinal bore, and the bolts D, substantially as set forth.

In testimony whereof I have hereunto set my hand this 15th day of October, A. D. 1886.

FREDERICK E. KOHLER.

Witnesses:

CHAS. R. MILLER,
W. K. MILLER.