

(No Model.)

E. HOUTZ.  
HARVESTER ATTACHMENT.

No. 410,100.

Patented Aug. 27 1889.

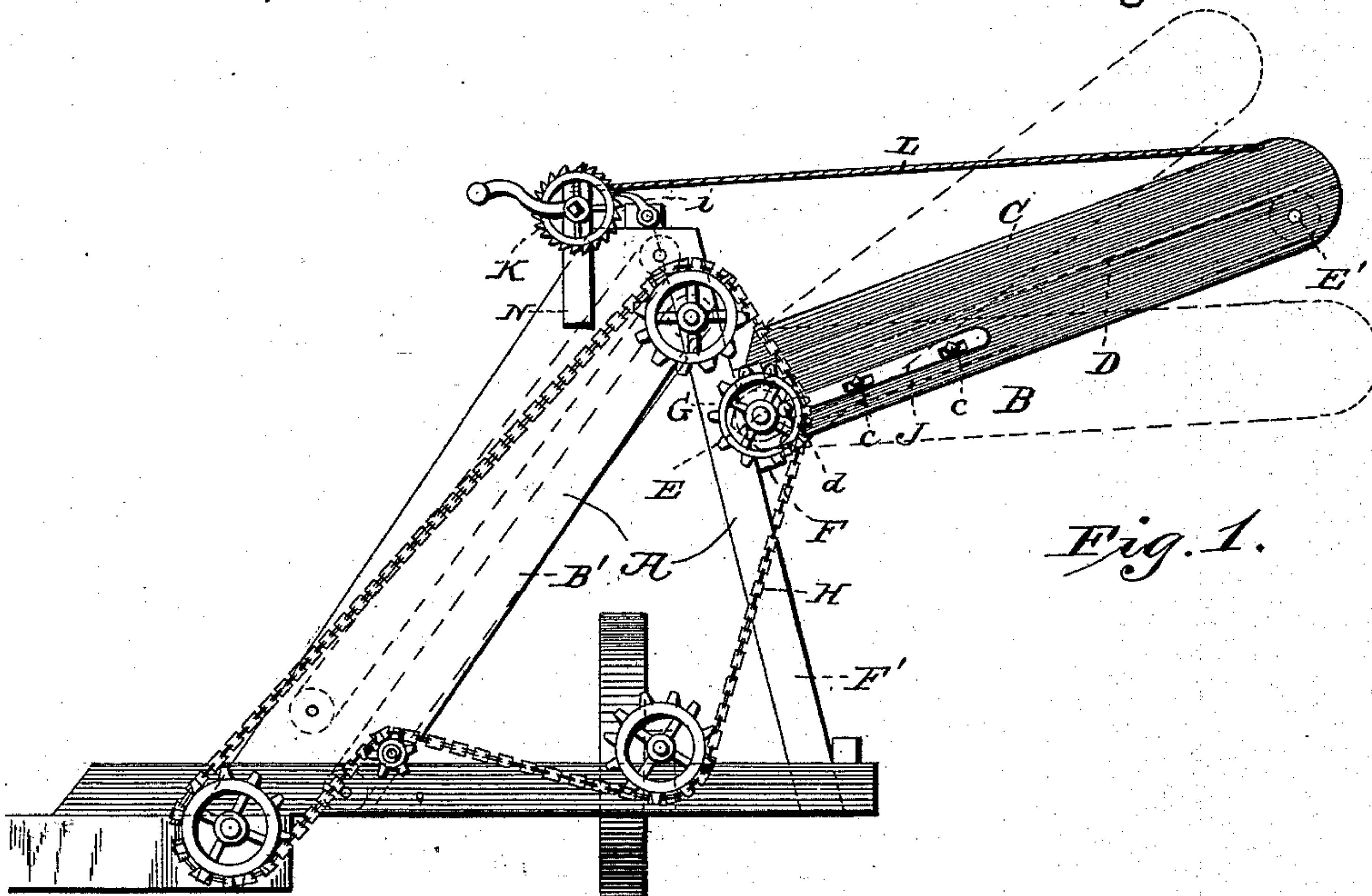


Fig. 1.

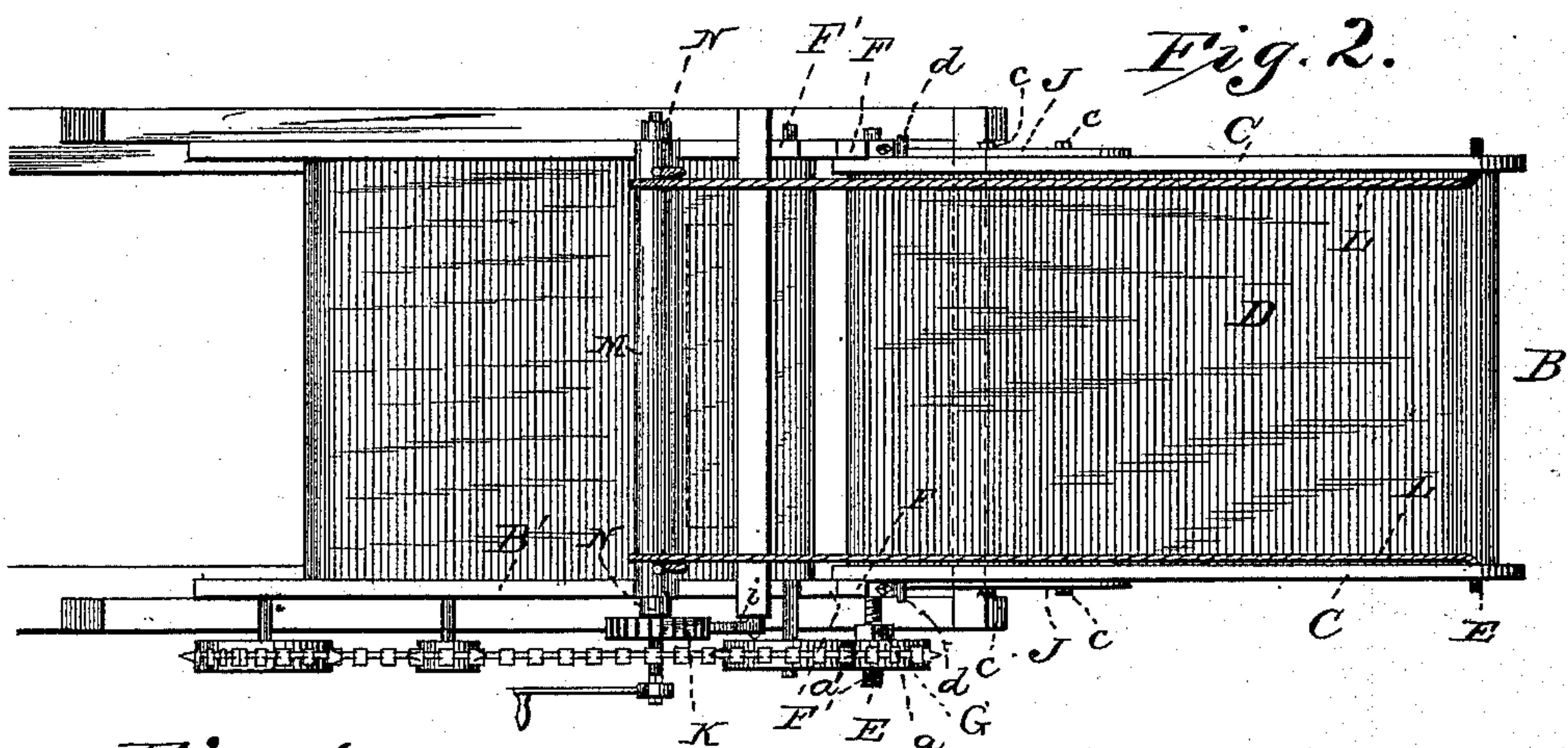


Fig. 2.

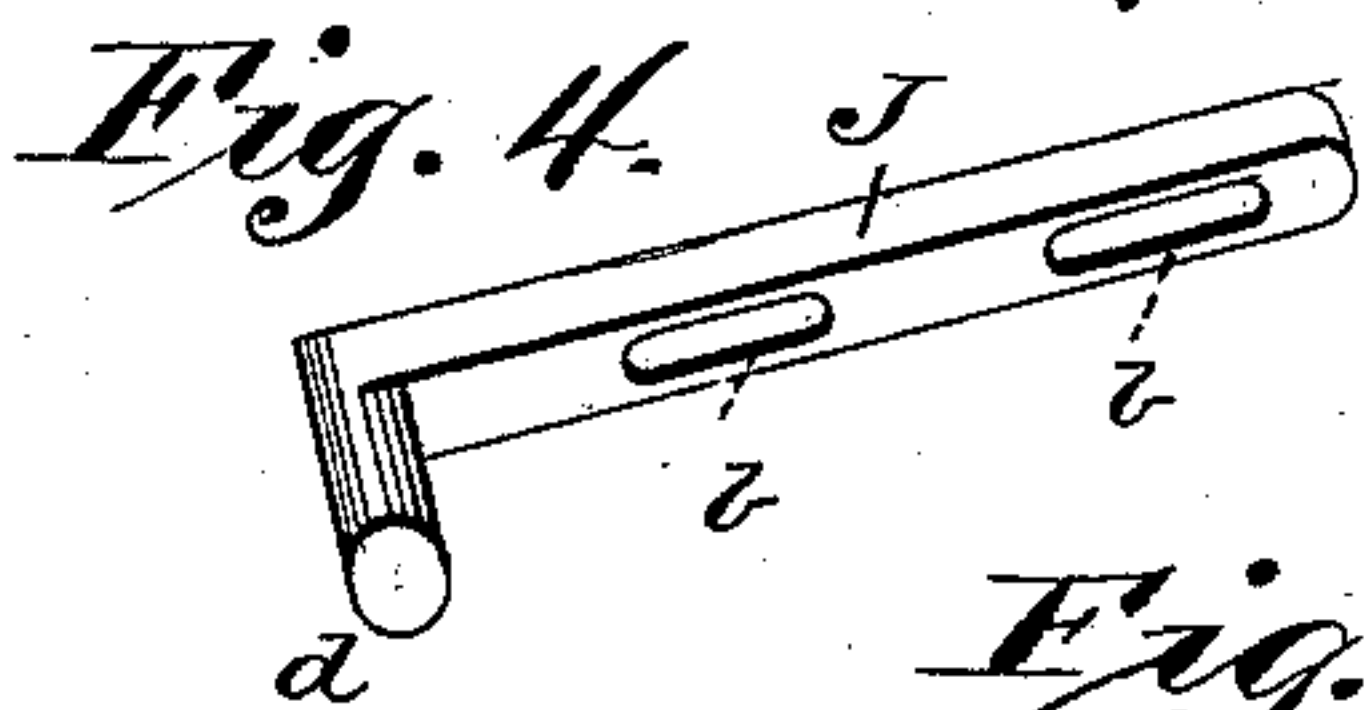


Fig. 4.

Fig. 5.

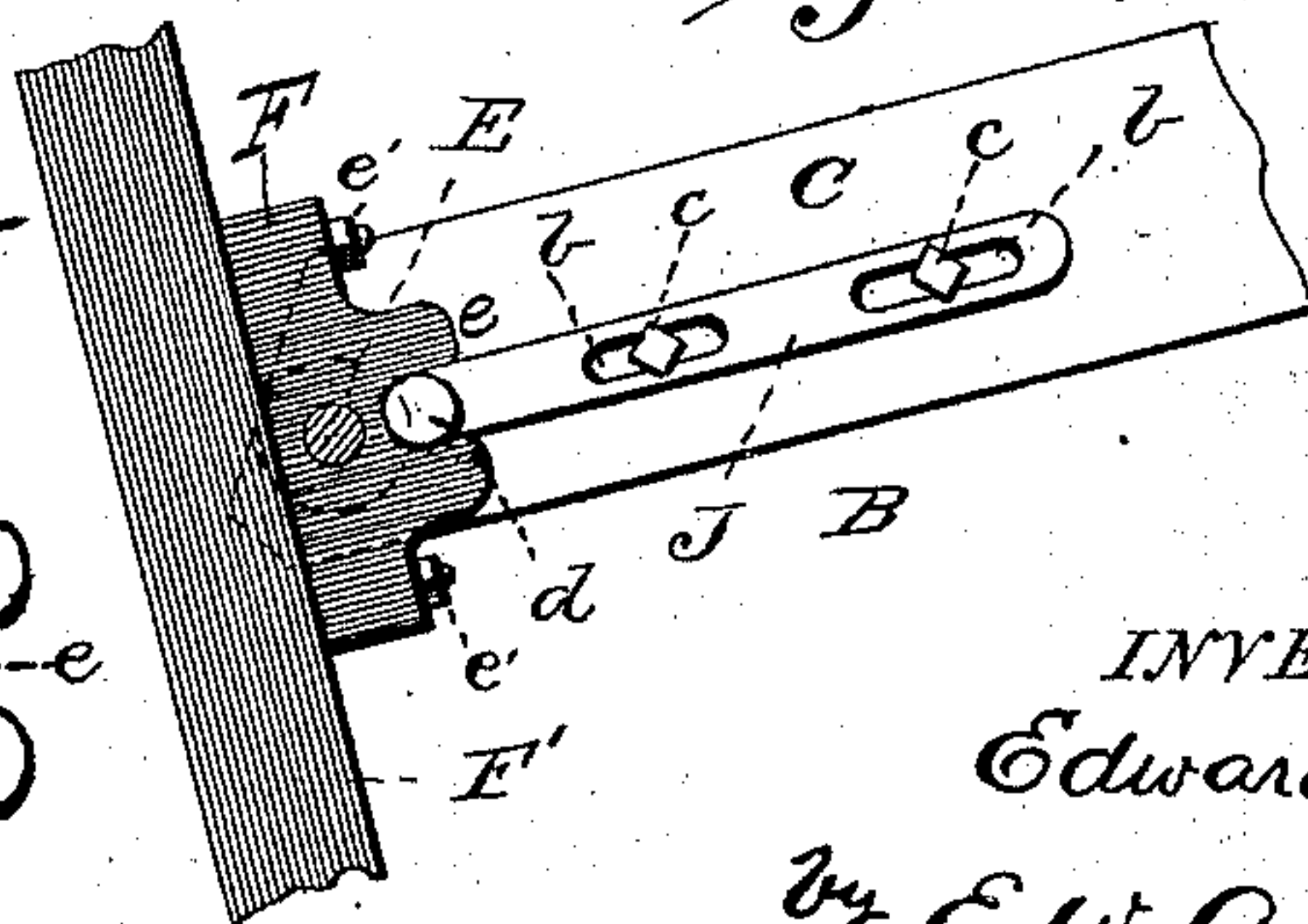
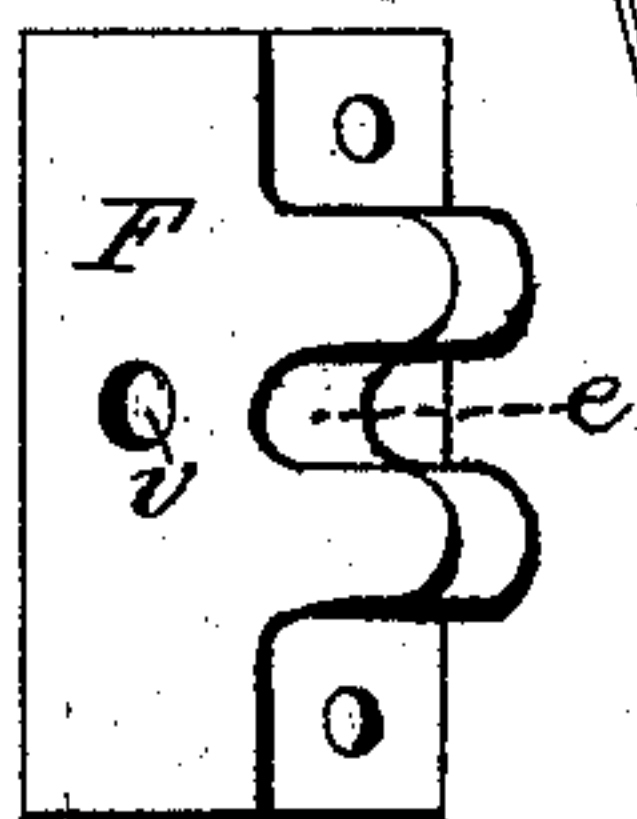


Fig. 3.

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# UNITED STATES PATENT OFFICE.

EDWARD HOUTZ, OF BLUNT, DAKOTA TERRITORY, ASSIGNOR OF TWO-THIRDS TO SOLOMON RIMER, OF SALESVILLE, OHIO, AND ARCHIE BROWN, OF BLUNT, DAKOTA TERRITORY.

## HARVESTER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 410,100, dated August 27, 1889.

Application filed June 19, 1888. Serial No. 277,562. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD HOUTZ, a citizen of the United States, and a resident of Blunt, in the county of Hughes and Territory of Dakota, have invented certain new and useful Improvements in Harvester Attachments; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a side elevation of my invention. Fig. 2 is a plan view of the same. Fig. 3 is a detail side view of a portion of the frame-work, showing one of the journal-boxes and plates J. Fig. 4 is a detail view of one of the plates J. Fig. 5 is a detail view of one of the journal-boxes F.

The invention relates to improvements in header attachments and connections for harvesters, and is designed to be used in place of the binder attachment when the same is removed; and it consists in the construction and novel combination of parts, as hereinafter set forth.

It is not deemed necessary to illustrate the parts of the harvester not directly operating in combination with my attachment, which is an extension from the main frame designed to convey the grain to a wagon.

Referring to the drawings, A designates the usual "A-frame," composed of the elevator side-boards B' and the struts F'; and to which is usually attached the binder. Within the elevator the endless aprons are operated to convey the grain from the platform to the binder.

B represents the header attachment, consisting of two side-boards C, of any desired length and sufficiently wide to extend above the surface of the apron D, to guide the grain and prevent it from being blown off. The apron D revolves on the transverse rollers E E', having suitable journal-bearings in and near the ends of the side-boards C, both of which rollers are removable with the header in detaching it from the frame A. The jour-

nals of the inner roller E extend outwardly and have bearings in the openings *v* of the boxes F, bolted to the struts F' of the A-frame by means of the bolts *e'*, and one of which boxes F is first removed to permit of the removal of the header, after which said box is again put in position, and serves, with its fellow box, for use in connection with the binder when in place upon the frame A. A sprocket-wheel G is secured on the outer end of one of the journals and engages the sprocket-chain H, which operates the other gearing connected to the harvester. The outer end portion of the journal upon which is located the wheel G is screw-threaded and fitted with a jam-nut *a*, by means of which the wheel is jammed tightly in position upon said journal against a pin *a'*, or second nut it may be, applied to the extreme outer end of said journal. Besides, this arrangement may be used to align the sprocket-wheel G with the other chain-belt sprocket-wheels. The journal is made long enough to allow said adjustment.

J J designate iron plates provided with longitudinal slots *b*, to permit of a limited longitudinal movement of the plates for the purpose which will appear further on, and through which slots the set-bolts *c* pass into the side-boards. The inner ends of these plates have outwardly-turned offsets *d*, which are rounded, as shown, and bear in the concavities *e* in the boxes F. The arms or studs of these sliding plates or bars fit into the concavities of the journal-boxes F, and as they are virtually a part of the header-frame the action or pressure of said arms or studs upon the boxes will take a portion of the weight of the frame off the journals of the roller E, and thus permit the latter to turn more easily and with less friction. The outer end of the header attachment is suspended, and consequently upheld or supported and made vertically adjustable, by means of two cords or chains L, secured at one end to the side-boards and connected with the windlass M, having bearings in the brackets N, secured to the elevator-frame. A pawl *i*, engaging the ratchet-wheel K on the windlass-journal, secures said windlass when the attachment is properly elevated.

When it is desired to raise or lower the at-



5 attachment, the set-bolts *c* are loosened and the slide-plates *J* set back from the concave bearings *e*, and when the attachment has been adjusted in the proper position by means of the windlass *M* and cords *L* the offsets *d* of the plates *J* are moved inward again and caused to bear upon the upper surface of the lugs forming the upper walls of said concavities.

10 What I claim as my invention, and desire to secure by Letters Patent, is—

15 1. The combination, with the **A**-frame of a harvester, of the header attachment consisting of the side-boards, the apron, the rollers *E* and *E'*, mounted therein, the roller *E* having extended journals, the journal-boxes secured to the struts of the **A**-frame and having concave bearings on their outer faces, the plates secured to the side-boards of the attachment and having offsets engaging the concave bearings, and the suspending-cords, substantially as specified.

25 2. The combination, with the **A**-frame of a harvester, of the header attachment consisting of the side-boards, the apron *D*, its outer roller *E'* and inner roller *E*, having an extended threaded journal, the boxes *F*, having

concavities on their outer faces, the sprocket-wheel adapted to be turned by the harvester-chain *H* and adjustable on said threaded journal, the adjusting-nut bearing against the inner face of said wheel, the plates having the offsets bearing in the concavities of the boxes, the windlass, the suspending-cords, the pawl, and the ratchet-wheel, substantially as specified.

35 3. The combination, with the **A**-frame of a harvester and gear-chain, of the journal-boxes secured to the struts of the **A**-frame and having the concavities *e* on their outer faces, and the header attachment consisting of the side-boards, the rollers *E* and *E'* and the apron *D*, the plates *J*, having the longitudinal slots and the rounded offsets to bear in the concavities *e*, and the set-bolts, substantially as specified.

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

EDWARD HOUTZ.

Witnesses:

J. I. HOUTZ,  
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