

(No Model.)

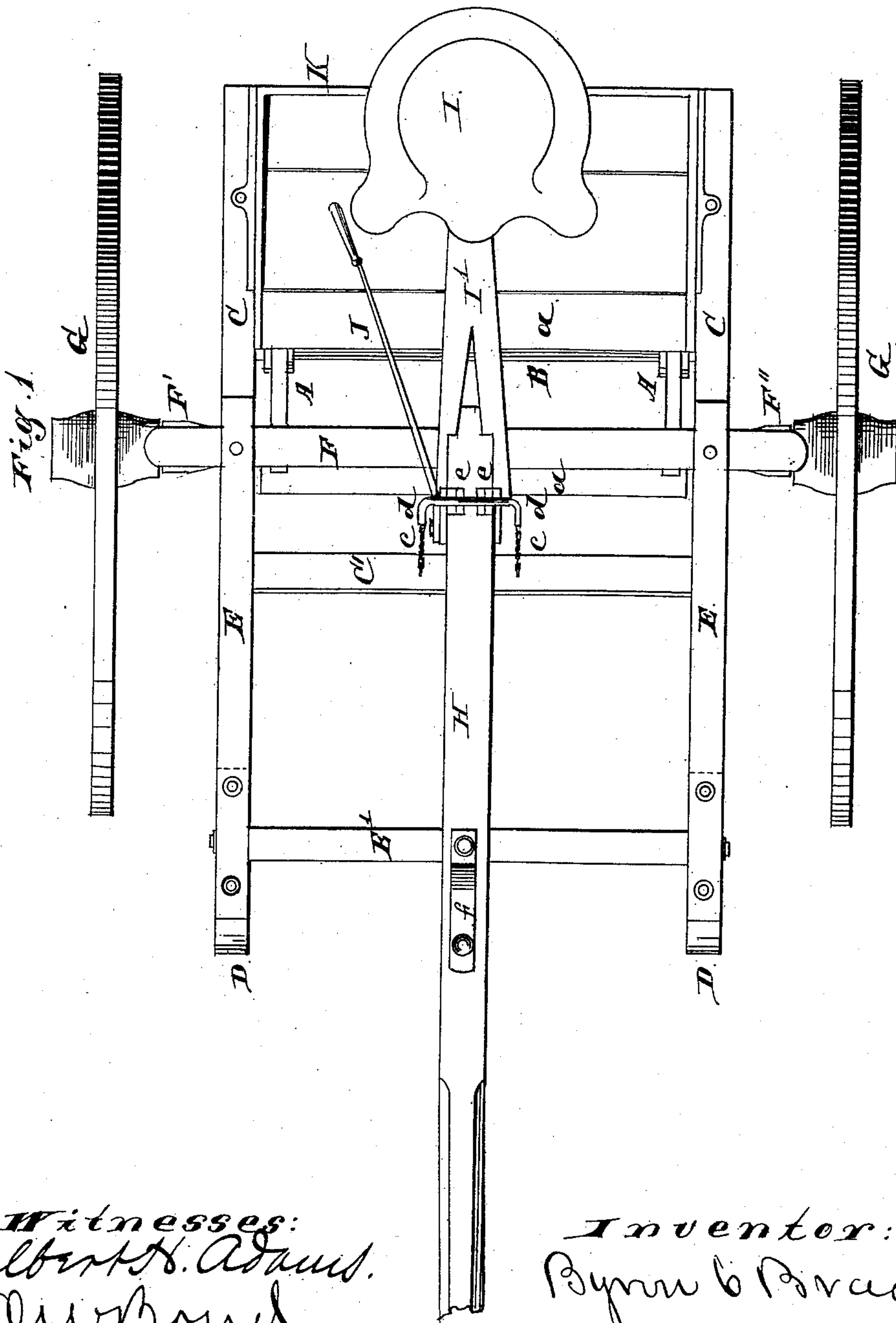
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B. C. BRADLEY.

STALK CUTTER.

No. 353,398.

Patented Nov. 30, 1886.



(No Model.)

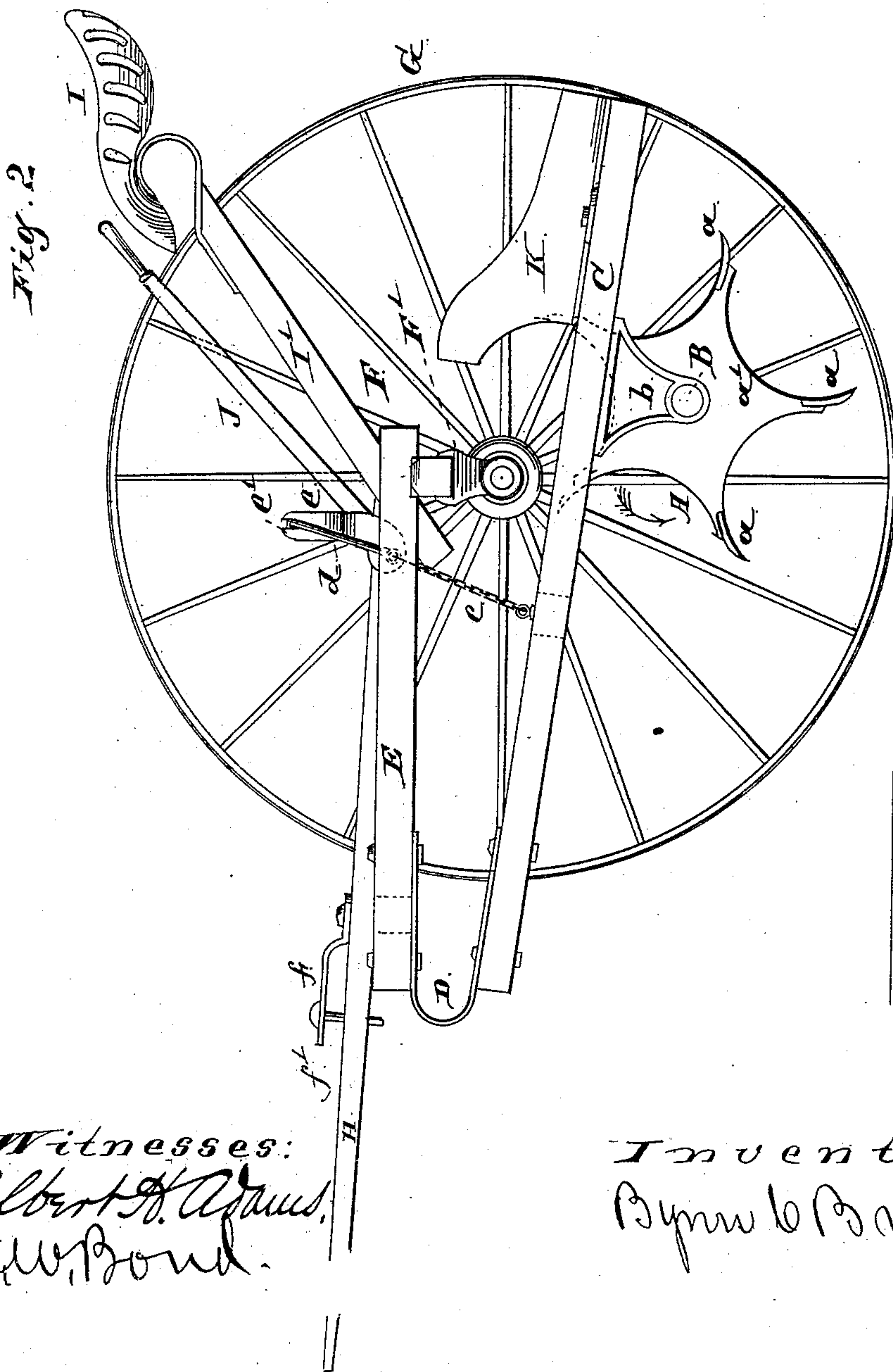
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STALK CUTTER.

No. 353,398.

Patented Nov. 30, 1886.



Witnesses:
Albert H. Adams,
Chas. Bond.

Inventor:
Bryan B. Bradley

(No Model.)

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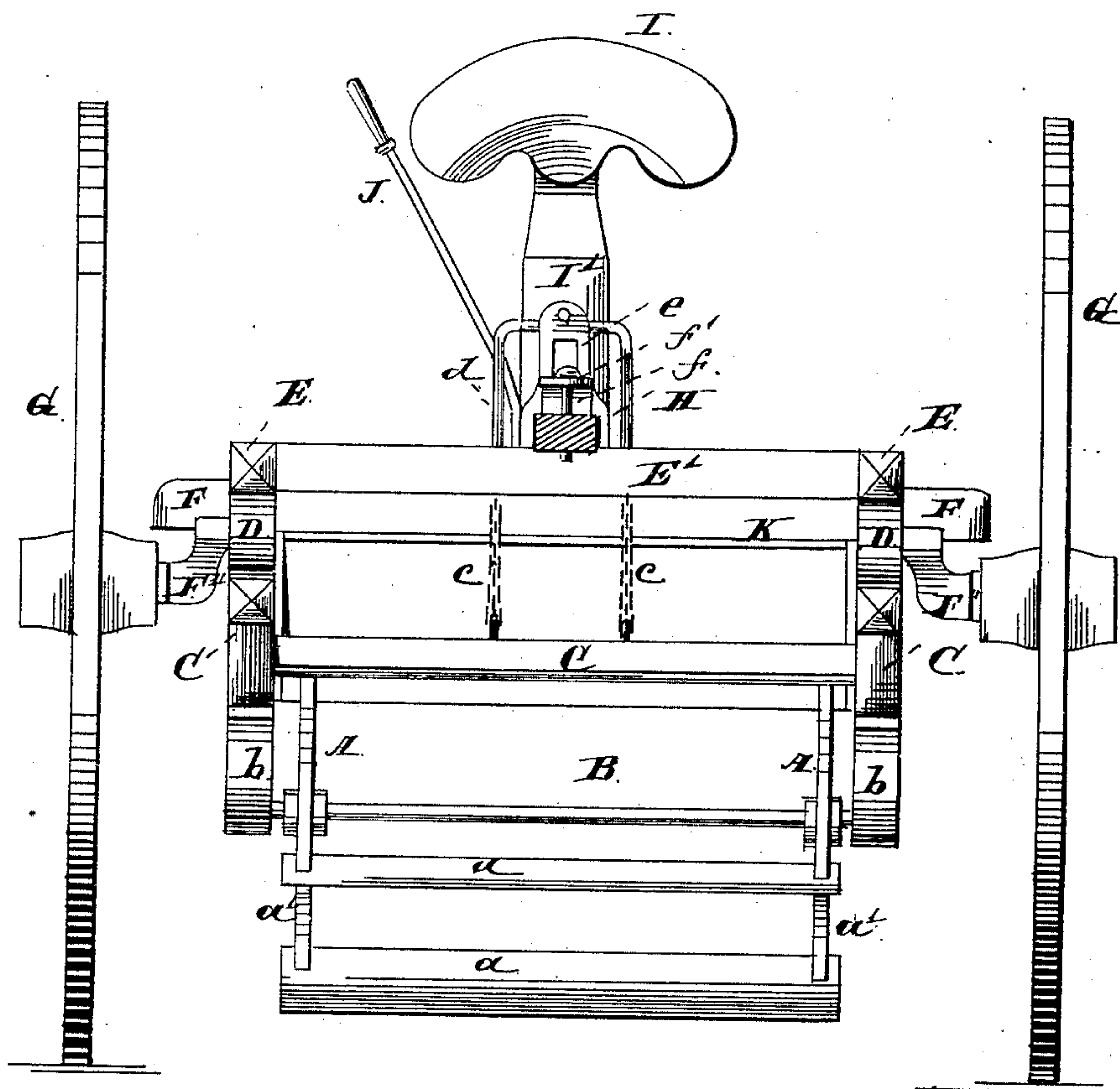
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Fig. 3.



Witnesses:
Albert H. Adams.
O. W. Bond.

Inventor:
Byron C. Bradley

UNITED STATES PATENT OFFICE.

BYRON C. BRADLEY, OF CHICAGO, ILLINOIS.

STALK-CUTTER.

SPECIFICATION forming part of Letters Patent No. 353,398, dated November 30, 1886.

Application filed November 27, 1883. Serial No. 112,984. (No model.)

To all whom it may concern:

Be it known that I, BYRON C. BRADLEY, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Stalk-Cutters, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a top or plan view; Fig. 2, a side elevation with the wheel removed; Fig. 3, a front end elevation.

This invention relates to that class of stalk-cutters which are used for the purpose of breaking down and cutting into small sections the standing stalks of corn and enabling the stalks to be plowed under, and has for its object to improve the construction and operation of such stalk-cutters by so simplifying their construction that the springs, in addition to their usual pressure function, act as hinges for the cutter-frame, and permit of the rising or falling of the cutter, or either end thereof, as hereinafter more specifically described, and pointed out in the claim.

In the drawings, A represents the cutter, consisting of end plates, *a'*, to which are secured in any suitable manner the knives or cutters *a*. Each end plate, *a'*, as shown, is formed with five arms, each of which has secured thereto a blade or cutter, *a*, and a greater or less number of arms and blades or cutters may be used, if desired.

B is a shaft mounted in suitable bearings, *b*, depending from the side pieces of the cutter-frame. This shaft B has firmly secured thereto in any suitable manner the plates *a'*, so that the shaft and plates will revolve together.

C is the side pieces of the cutter-frame, located below the axle of the machine, and connected together, as shown, by a cross-piece, *C'*. This cross-piece *C'* has attached thereto, by suitable eyebolts or otherwise on each side of its center longitudinally, a chain, *c*, which chains are attached to the ends of a yoke or hanger, *d*, the body of which is supported in openings *e'* in the ends of arms *e*, which arms are pivotally attached, one on each side of the tongue. The chains *c*, hanger *d*, and pivoted arms *e* furnish the means for raising the cutter-frame and cutter clear of the ground when traveling from place to place, or for other pur-

poses when it is desired to have the cutter non-acting.

D represents springs connecting the forward end of the cutter-frame to the main frame. These springs are located one on each side of the machine, and are attached at one end to the upper face of the side bars, C, of the cutter-frame, and at the other end to the under face of the side bars of the main frame. These springs form a yielding connection between the cutter-frame and the main frame, by which the cutter is left free to rise and fall, and at the same time the connection is one having a downward pressure, by which the cutter will be held down to its work.

E represents the side bars of the main frame, arranged above and in line with the side bars of the cutter-frame, and attached at their rear ends to the axle, and connected at their front end by a cross-bar, *E'*.

F is the axle, having attached to each of its ends a head or casting, *F'*, on which are located the spindles for the wheels.

G represents the wheels on which the machine as a whole is supported and carried.

H is the tongue, attached at its rear end to the axle F, and having located thereon a strap, *f*, by means of which and a bolt, *f'*, the double-tree is held in position.

I is the seat, located on the upper end of a standard, *I'*, the lower end of which is connected to the axle F or to the tongue H, or otherwise, so as to support the seat proper.

J is a lever attached at its lower end, by bolts or otherwise, to one of the arms *e*, and extending up and arranged to be grasped by the operator on the seat I, and raise and lower the frame and cutter by moving the lever backward and forward, the movements of the lever raising and lowering the arms *e*.

K is a guard, made of wood or other suitable material, and located on the rear end of the cutter-frame, above the cutter and beneath the seat, to prevent any one from accidentally falling or getting into the cutters when the machine is in use.

Heretofore it has been customary in stalk-cutters to connect the cutter-frame at its forward end to the main frame by means of a hinged or pivotal connection. By using the spring-connections D, as shown and de-

scribed, the cutter-frame is attached to the main frame in a firm and secure manner, while the cutter is free to rise and fall vertically, and is held down to its work by the downward pressure of the spring-connection.

In operation, the machine is driven to the field where the standing stalks are to be cut, and moved across such field so that the stalks of a row lie midway of the wheels, or thereabout, and when in use the cutter is lowered so as to ride on the ground and have the forward movement of the machine rotate the cutter, and such forward movement of the machine breaks down the standing stalks, and such stalks, by the rotation of the cutter, are chopped or cut into the proper length to be readily turned under.

The cutters *a* extend across from end plate to end plate, thus securing rigidity in the cutter as a whole, and the rotation of the cutter is secured by the engagement of the arms of the end plates and the blades with the surface of the ground; and it will be readily understood that the length of pieces cut will depend on the distance apart at which the cutters are arranged.

The spring-connection for the cutter-frame is a feature of great importance in stalk-cutters, as by its use the cutter will be held down to its work, and at the same time is free to rise and fall to suit the lay of the land, thus en-

abling the cutter to ride readily over obstructions, uneven ground, and other like impediments.

I am aware that in grain-drills a bar carrying a grain-tube and a cutting-blade beneath the seed-box has been connected at its forward end by a spring-plate to a rocking bar; also, that in harrows the tooth-beam has been connected at its forward end by a U-shaped spring to a cross-bar of the frame; also, that springs have been employed in stalk-cutters to allow the cutter to rise and fall vertically. Therefore I do not broadly claim such matter.

What I claim as new, and desire to secure by Letters Patent, is as follows:

In a stalk-cutter, the combination of the upper and lower bars, C and E, located in line above each other and forming the main frame and cutter-frame, the U-shaped springs D, connecting said frames together at their forward ends, the revolving cutter A, connected to the lower frame, the arms *e*, pivotally secured to the upper frame and connected with lever J, and the yoke *d* and chain *c*, connecting the lower frame to the arms *e*, substantially as described.

BYRON C. BRADLEY.

Witnesses:

B. A. PRICE,
O. W. BOND.