

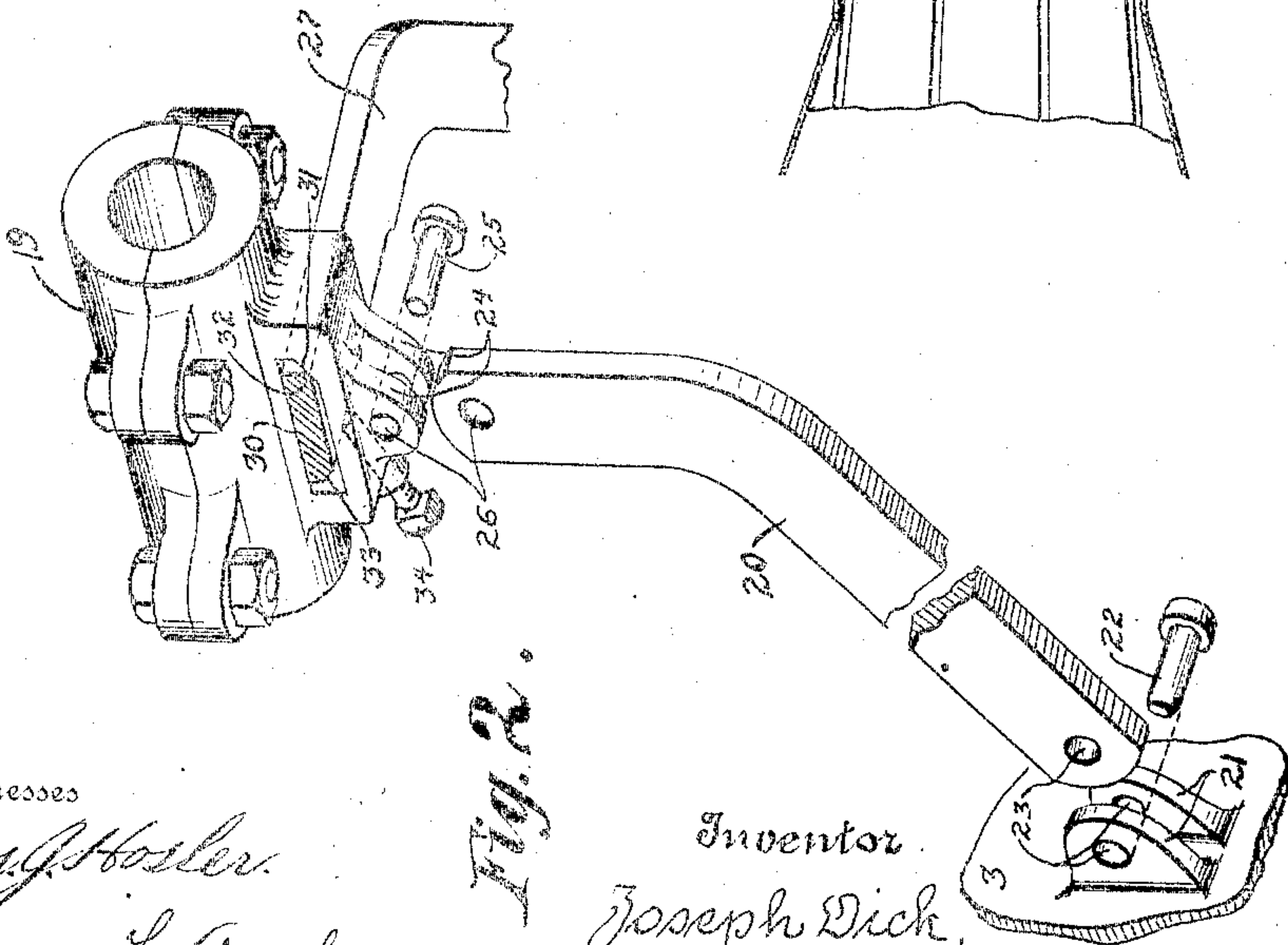
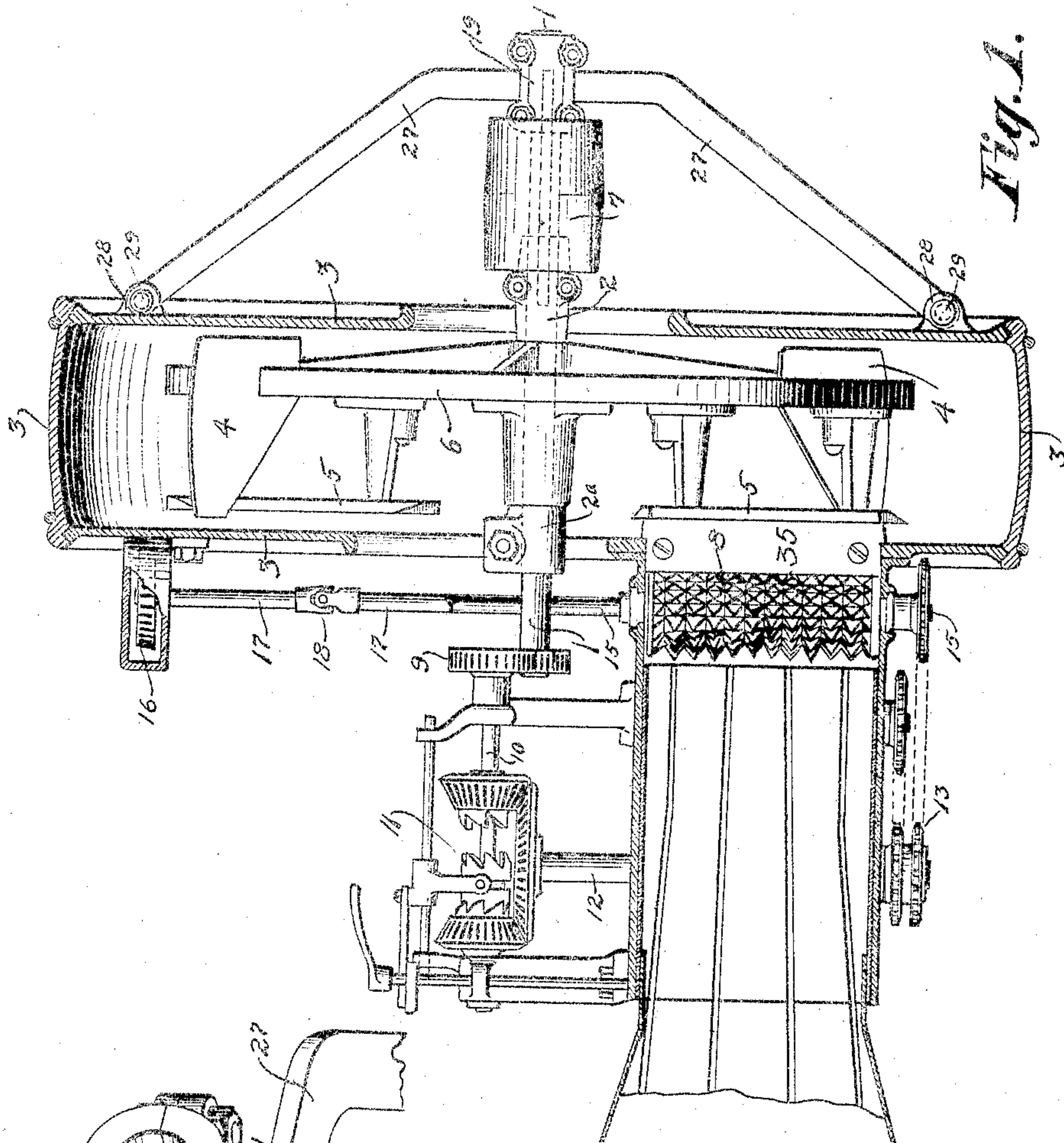
No. 883,391.

PATENTED MAR. 31, 1908.

J. DICK.

FODDER CUTTER.

APPLICATION FILED APR. 28, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH DICK, OF CANTON, OHIO.

FODDER-CUTTER.

No. 883,391.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed April 28, 1906. Serial No. 314,132.

To all whom it may concern:

Be it known that I, JOSEPH DICK, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have
5 invented a new and useful Improvement in Fodder-Cutters, of which the following is a specification.

The invention relates to certain features in the construction of the outer bearing support for the main shaft, in machines for
10 cutting forage.

The general objects of the invention are to provide means for mounting and supporting the outer bearing for the main shaft so
15 that the driving belt can be applied and removed without difficulty, and for so adjusting and securing the shaft that the cutting knives will not be deflected by the tension of the belt. These objects are attained by the
20 construction, mechanism and arrangement illustrated in the accompanying drawings, in which—

Figure 1 is a plan section of a fodder cutter showing the general arrangement of the parts
25 and Fig. 2, a detached perspective view of the outer main shaft bearing showing fragmentary parts of its supporting bracket.

Similar numerals refer to similar parts throughout the drawings.

30 The main shaft 1 is journaled in suitable bearings 2 and 2^a axially mounted in the ends of the case 3, and the fans 4, and cutting knives 5 are secured to the main shaft by means of the balance disk 6 within the case,
35 and the pulley 7 is secured on the shaft in rear of the case. Power is communicated from the main shaft to the lower feed roll 8 by means of the cog gear 9, the counter shaft 10, the clutch gear 11, the transverse shaft
40 12, and the sprocket gear 13; and power is transmitted from the lower feed roll to the upper feed roll (not shown) by means of the shaft 15, the cog gear 16, and the shaft 17, which latter shaft is provided with the
45 knuckle joint 18 to accommodate the necessary vertical movements of the upper feed roll; which features of construction are common to machines of the type used to illustrate the improvement and, excepting in
50 combination, constitute no part of the present invention.

The rearward free end of the main shaft is journaled in the bearing 19 which is supported from below by means of the brace 20

which is preferably connected below to the 58 case by means of the ears 21 and the pin 22, passed through the apertures 23 in the brace and ears; and above to the bearing by means of the ears 24 and the pin 25 passed through
the apertures 26 in the ears and brace: and 60 the bearing 19 is sustained against lateral movement by means of the bracket 27 having its ends detachably connected to the case, preferably by means of the ears 28 and
pins 29 like the lower brace; which bracket 65 is passed through the slot 30 formed in the bearing, one corner of which slot is beveled to form the inclined face 31 against which the corresponding edge 32 of the bracket is adapted to be wedged, and the opposite edge 70
of the bracket is beveled to form the inclined face 33, against which face the set screw 34 in the bracket is adapted to be turned, by
which means the bracket is wedged against
the opposing inclined face of the bearing 75 slot whereby the bearing is rigidly held against lateral movement.

When it is desired to remove the pulley 7 or the driving belt (not shown), the same can be done by removing the bearing 19, which
80 is readily accomplished by removing the connecting pins by means of which the brace and bracket are secured to the case; and if it is desired to detach the bearing from or adjust it on the bracket, it is only necessary to
85 loosen the set screw 34.

When the detachable bearing 19 is mounted on the brace and bracket and the set screw is loosened, it is evident that the bearing can be adjusted by sliding it laterally
90 along the bracket, and that when it has been brought into true alinement with the case bearings 2 and 2^a it can be secured in this position by tightening the set screw. It will be understood that there is sufficient flexi-
95 bility in the supporting brace, or looseness in its joints, to accommodate the slight lateral movement of the detachable bearing required for its adjustment. The adjustment of the detachable bearing thus described serves to
100 bring the main shaft laterally into its true axial line, which is properly approximately perpendicular to the plane of the cutting knives, which knives are adapted to shear against the cutter bar 35 located in one end
105 of the case. And when the detachable bearing is secured in this position, it is evident that the tension of the belt on the pulley can-

not bend or flex the shaft and thus deflect the cutting knives out of their proper position with reference to the cutter-bar.

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

1. In a fodder cutter, an axial shaft having a pulley thereon outside the case, a journal bearing for the shaft outside the pulley, there being a transverse slot in the bearing having the faces tapered toward each other at one side, a detachable supporting brace between the bearing and the case, a lateral bracket detachably connected with the case at its ends and located in the transverse slot of the bearing, with means for forcing the bracket into the tapered side of the slot.

2. In a fodder cutter, a case with a cutter-

bar in one end thereof, a shaft journaled in the case and having cutting knives thereon adapted to shear against the cutter bar, a pulley on the shaft outside the case, a bearing for the shaft outside the pulley, a supporting brace and a bracket for the bearing connected with the case, and means for adjusting and securing the bearing on the brace and bracket.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH DICK.

Witnesses:

FRANK J. DICK,
HARRY FREASE.