

No. 670,270.

Patented Mar. 19, 1901.

W. L. CROUCH.

CHIP BREAKER.

(Application filed Aug. 17, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

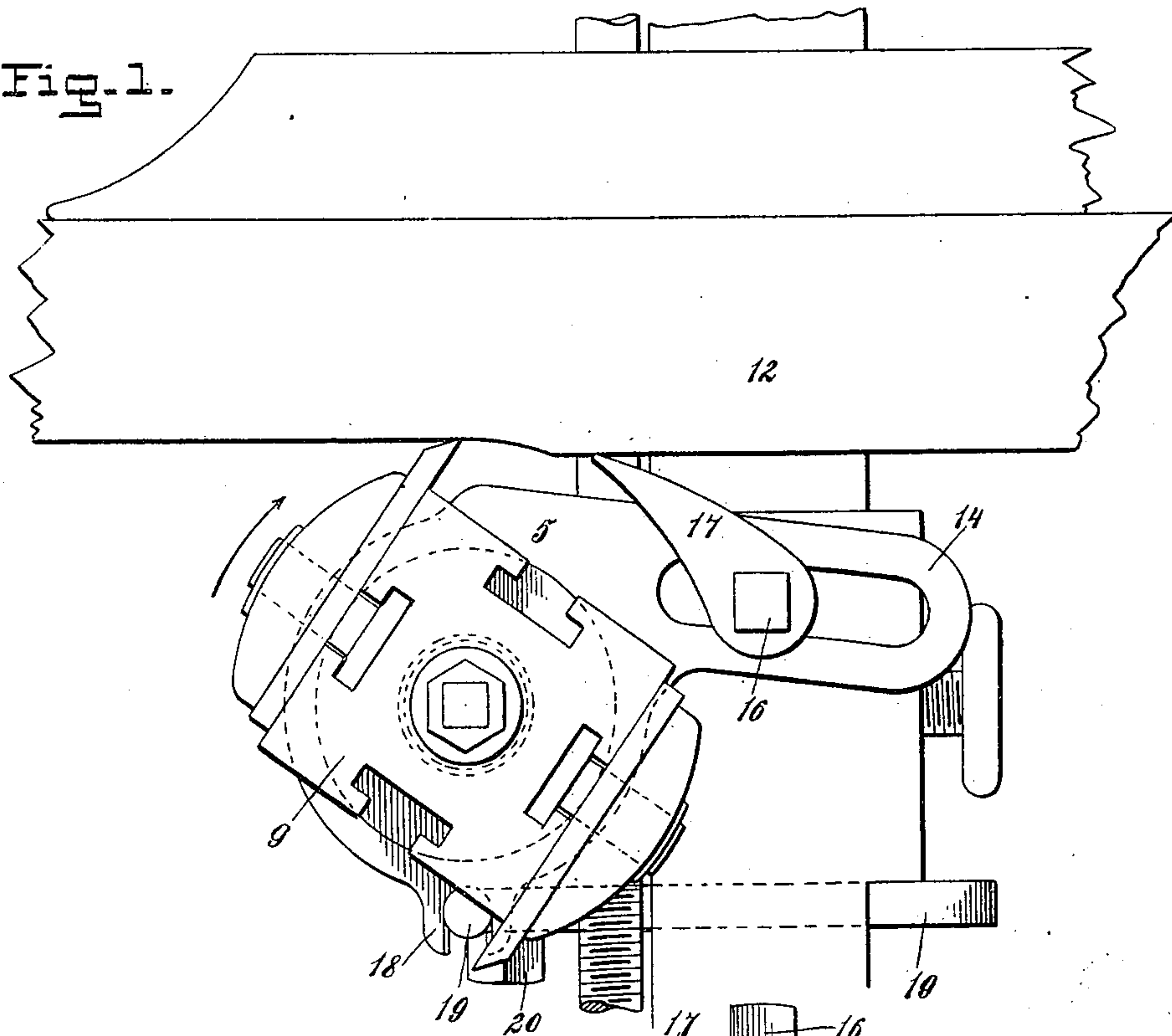
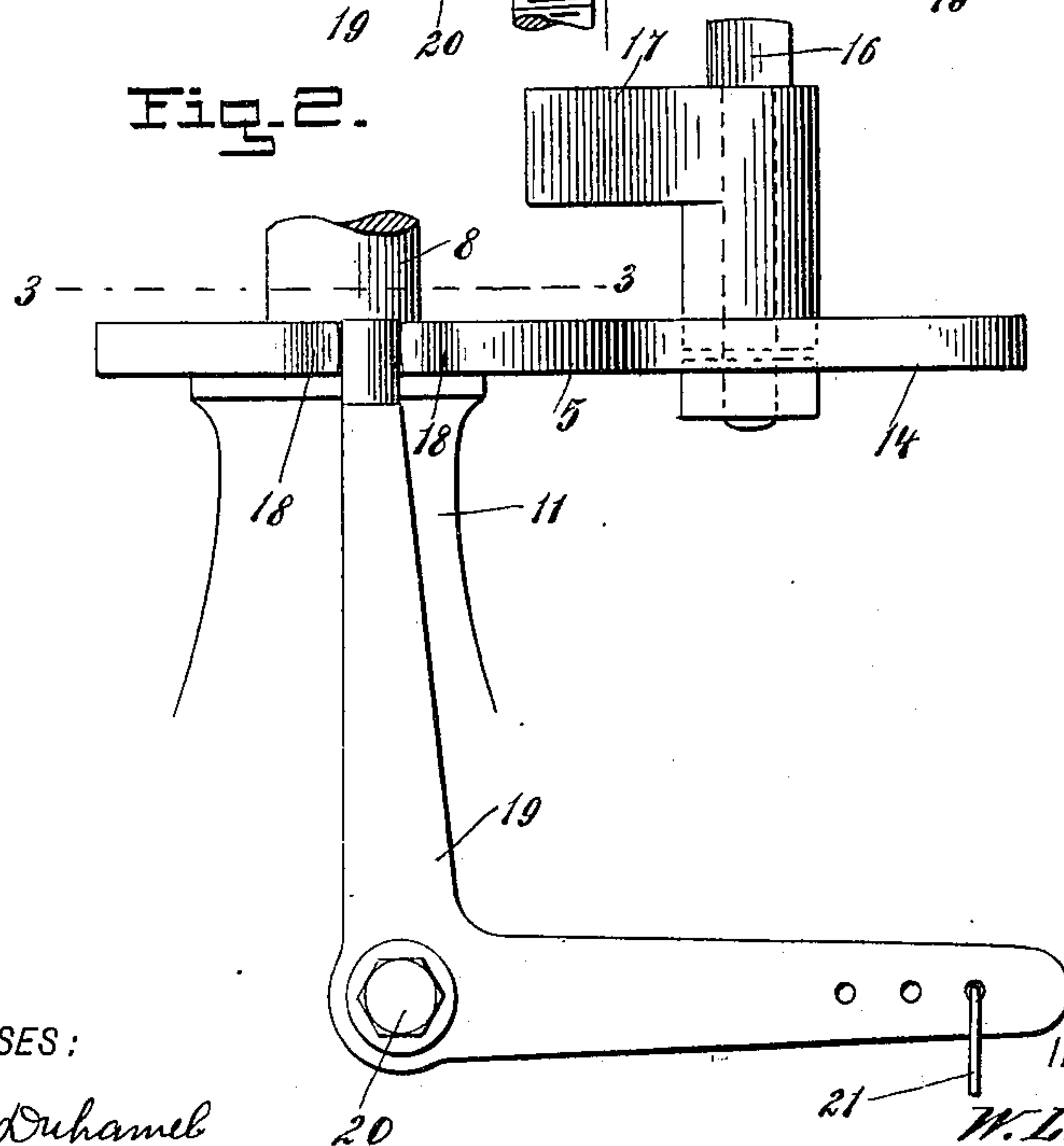


Fig. 2.



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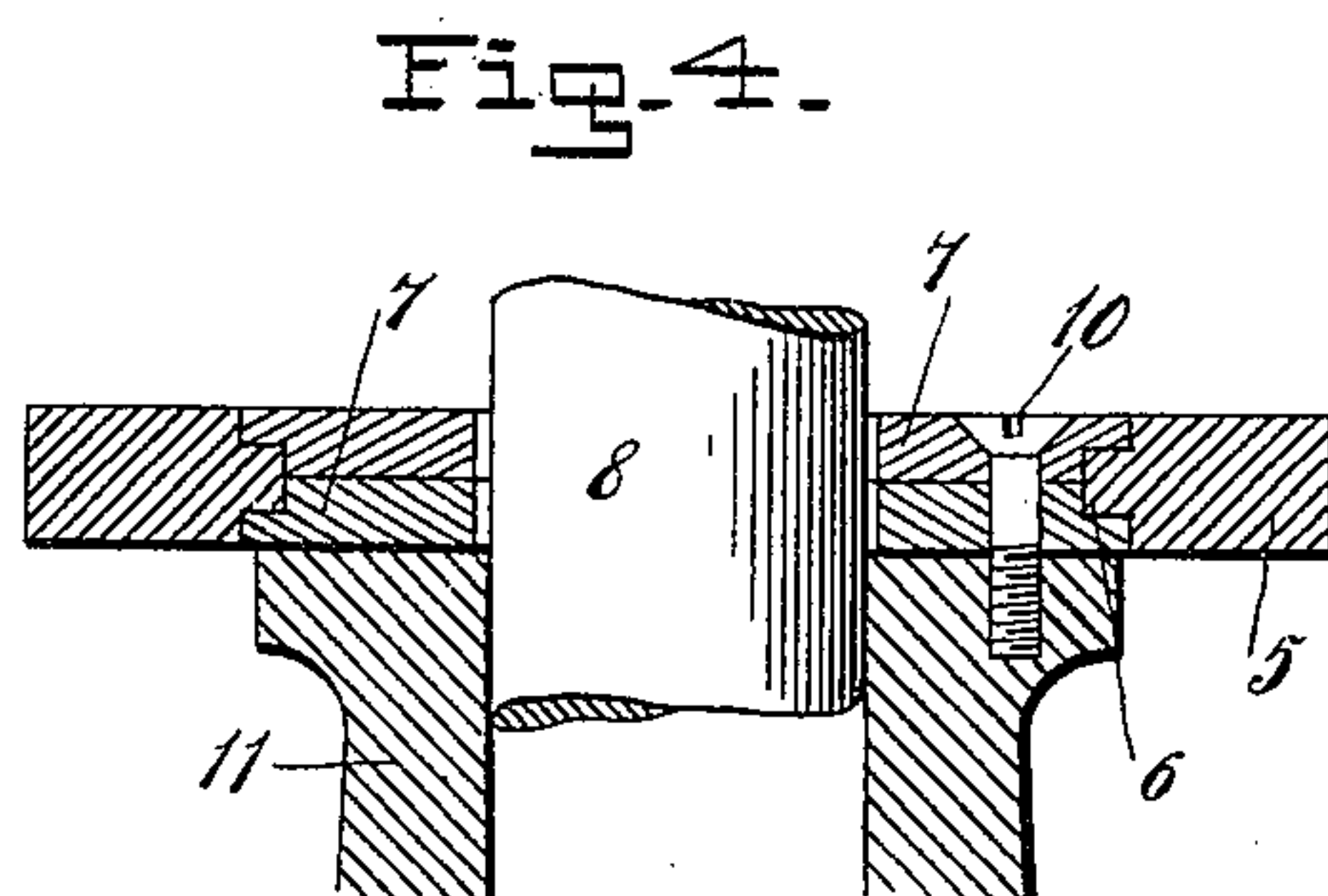
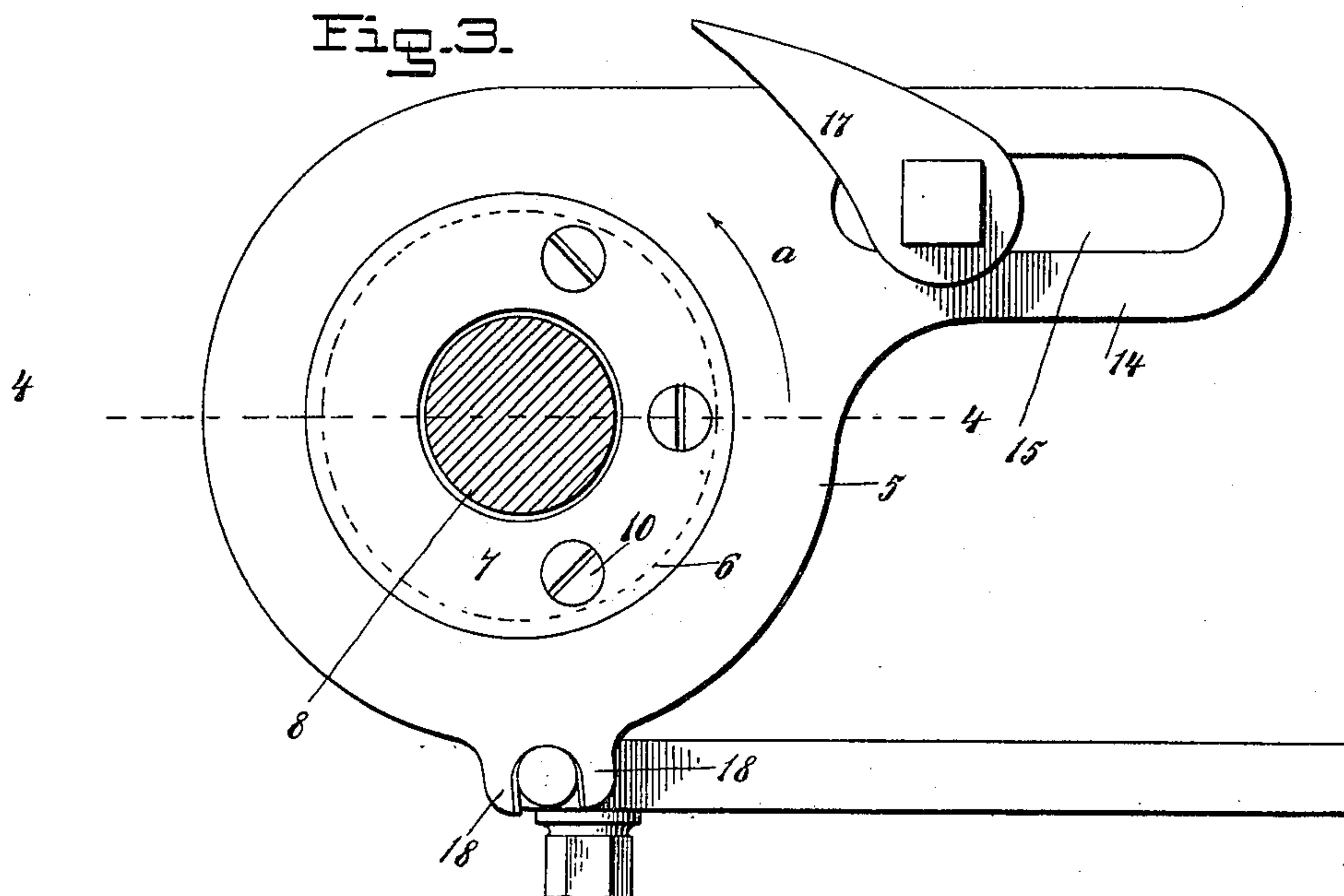
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# UNITED STATES PATENT OFFICE.

WALTER LEROY CROUCH, OF THOMASTON, CONNECTICUT.

## CHIP-BREAKER.

SPECIFICATION forming part of Letters Patent No. 670,270, dated March 19, 1901.

Application filed August 17, 1900. Serial No. 27,181. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER LEROY CROUCH, a citizen of the United States, and a resident of Thomaston, in the county of Litchfield and

5 State of Connecticut, have invented a new and Improved Chip-Breaker, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide a more efficient chip-breaker for molding and  
10 similar woodworking machines, to which end the invention comprises a carrier arranged to rock around the axis of a rotary cutter and carrying a finger which engages the work to break the chips and which moves concentric-  
15 ally to the axis of the rotary cutter.

This specification is the disclosure of one form of the invention, while the claim defines the actual scope thereof.

Reference is to be had to the accompanying  
20 drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the invention. Fig. 2 is a side elevation thereof. Fig. 3 is a  
25 plan view with the axis of the cutter in section on the line 3 3 of Fig. 2, and Fig. 4 is a vertical section on the line 4 4 of Fig. 3.

The invention comprises an essentially disk-shaped carrier 5, which has a central  
30 opening therein the wall of which is formed with an annular rib 6, that is arranged to turn in a guideway formed peripherally in two circular plates or disks 7, fastened together and arranged loosely around the axial  
35 shaft 8 of the rotary cutter 9. The screws 10, (see Fig. 4,) which fasten the disks 7 together, pass downward into the bearing 11 of the shaft 8, and by these means the disks 7 are fastened rigidly on the bearing, so that the  
40 shaft 8 may turn freely within the disks. These disks 7 form a support for the carrier 5. The rotary cutter 9 is arranged just above the disks 7 and operates on the work 12 in the usual manner. The carrier 5 has a tangen-  
45 tially-disposed arm 14 with a longitudinal slot 15 therein. This slot carries the screw 16, which holds the chip-breaking finger 17 ad-

justably on the arm 14 of the carrier 5. By means of the screw 16 the chip-breaking finger 17 may be adjusted to properly engage 50 the work. The carrier 5 is formed with two peripheral lugs 18 thereon, and between these lugs bears the upper end of a bell-crank lever 19, which is fulcrumed at the point 20, the fulcrum-pin being carried suitably on a sta- 55 tionary part of the machine. The lower or horizontal arm of the bell-crank lever 19 is attached by a suitable connection 21 to a weight, (not shown,) so that by this weight pressure is continually applied to the carrier 60 5, causing it to tend in the direction indicated by the arrow *a* in Fig. 3, thus pressing the chip-breaking finger 17 against the work 12, as indicated in Fig. 1.

It is explained that with this construction 65 the chip-breaker 17 moves against the work in an arc concentric with the axis of the rotary cutter, thus applying pressure to the work in the proper direction and causing the chips to be more uniformly and effectively 70 taken from the work.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a chip-breaker, the combination with 75 the cutter-head and the bearing for the axis thereof, of two disks fastened together and carried rigidly on said bearing, the disks having matching rabbet-grooves therein, a carrier with a central opening on the wall of 80 which is formed an annular rib fitting loosely in the rabbet-grooves of the disk to mount the carrier to turn on an axis coincident with that of the cutter-head, a chip-breaker proper held by the carrier, and means held by the 85 carrier to press the chip-breaker against the work.

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

WALTER LEROY CROUCH.

Witnesses:

NELSON BENNETT,  
JAMES BONNE.