

No. 745,947.

PATENTED DEC. 1, 1903.

G. WILSON.  
KNIFE HEAD FOR HARVESTING MACHINES.

APPLICATION FILED AUG. 27, 1903.

NO MODEL.

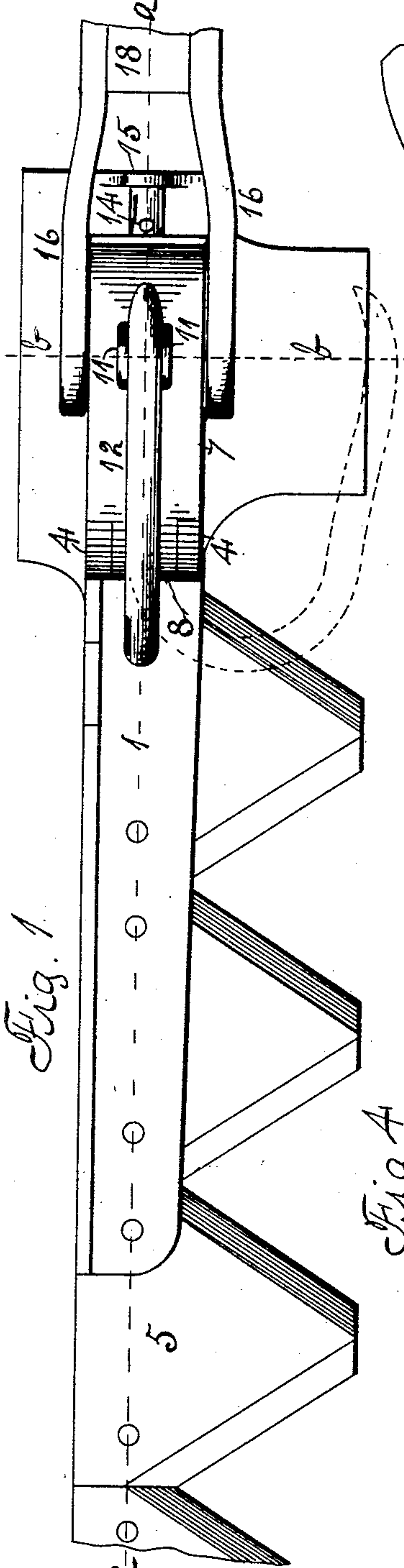


Fig. 1.

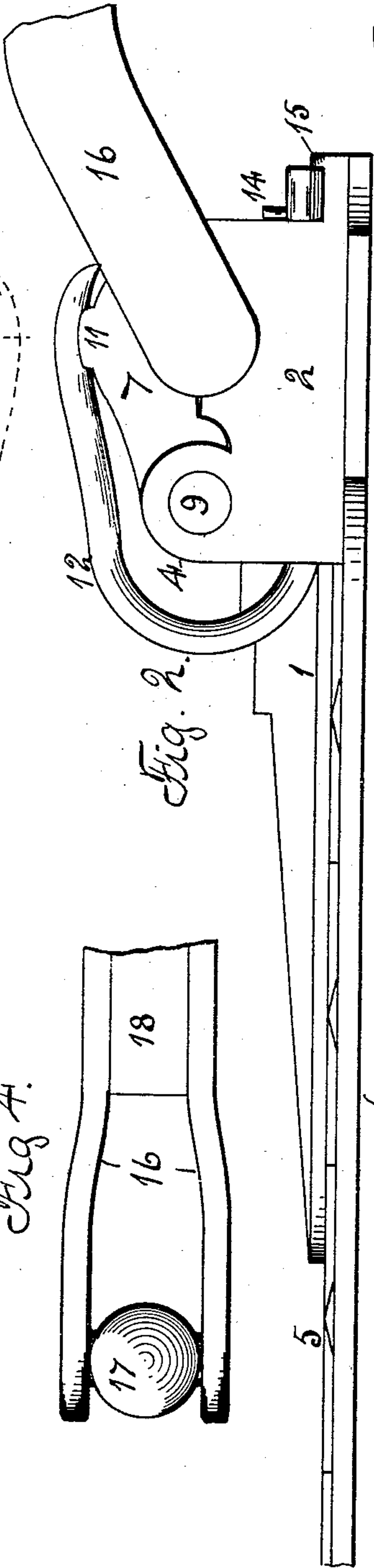


Fig. 2.

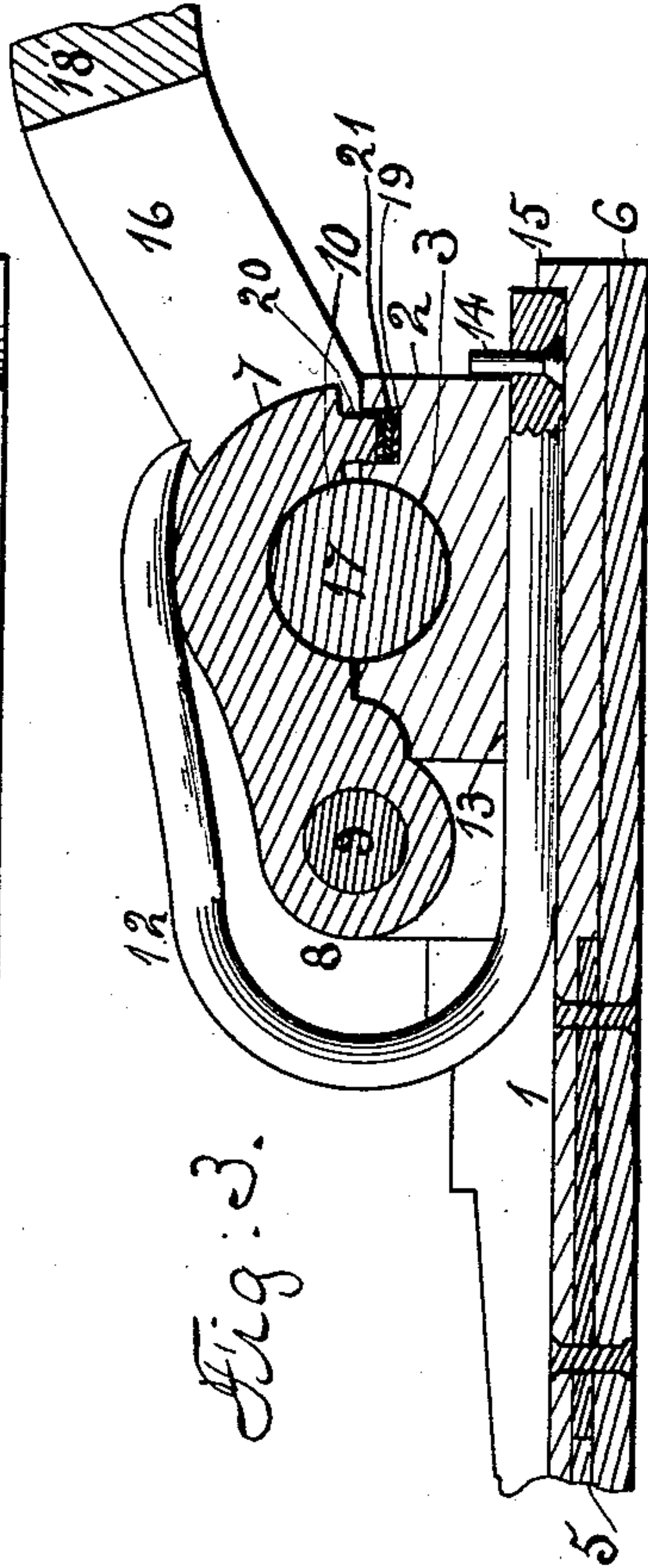


Fig. 3.

Fig. 4.

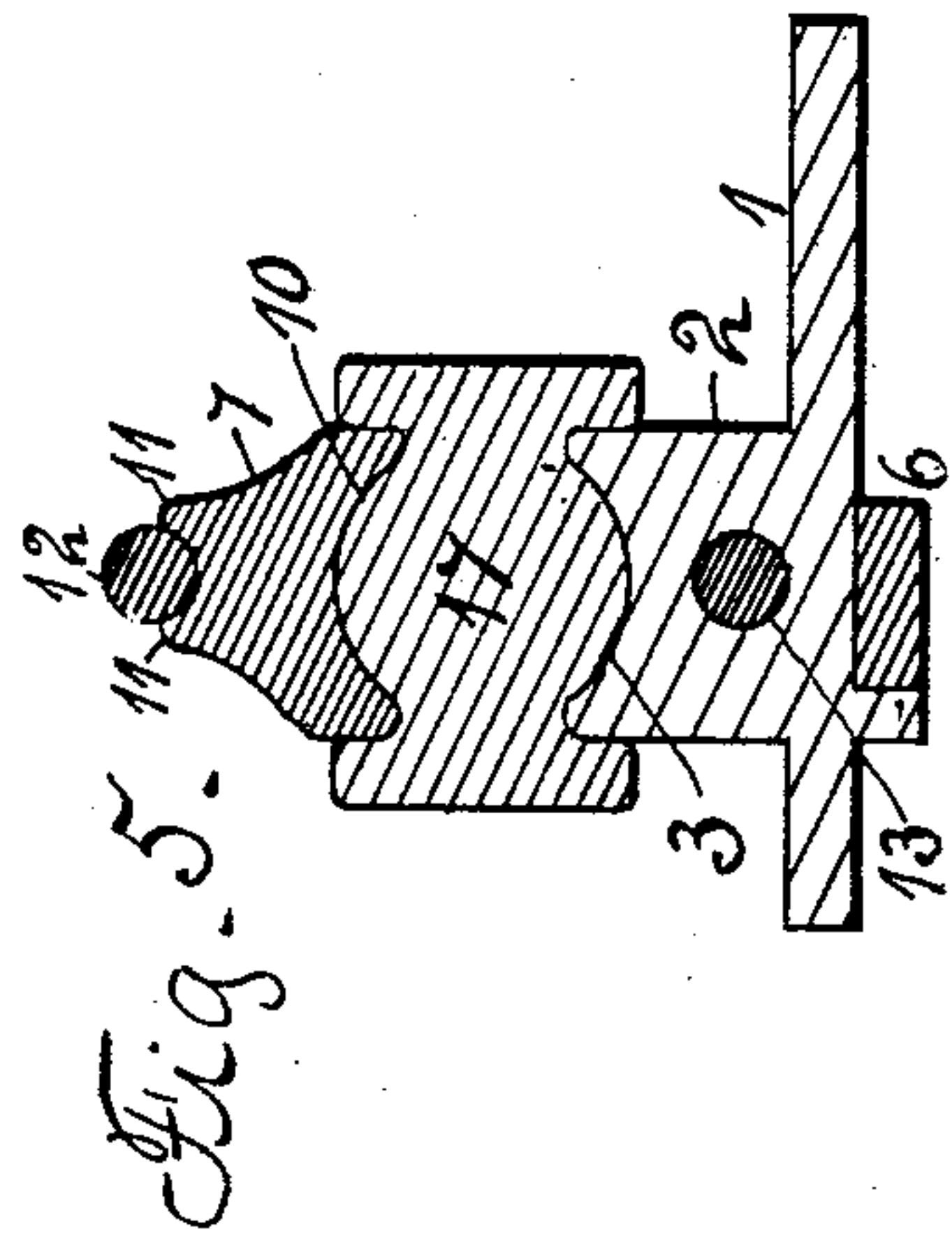
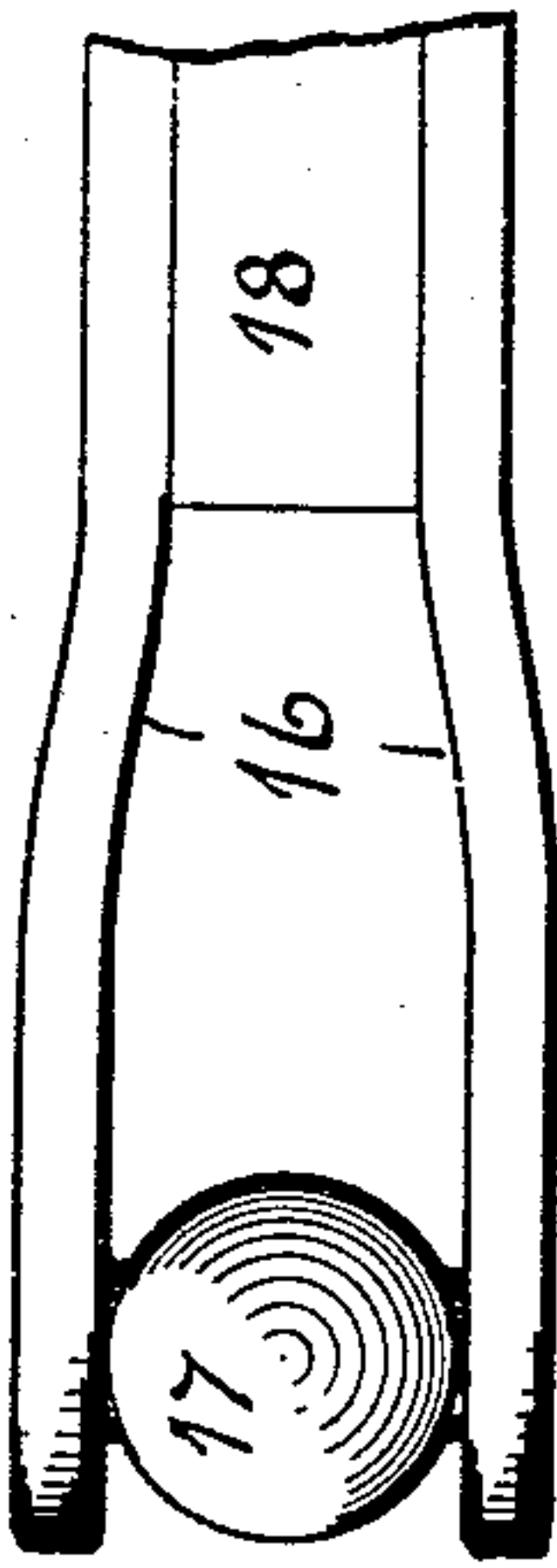


Fig. 5.

Witnesses:  
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# UNITED STATES PATENT OFFICE.

GEORGE WILSON, OF ROCKFORD, ILLINOIS, ASSIGNOR TO EMERSON MANUFACTURING COMPANY, OF ROCKFORD, ILLINOIS, A CORPORATION OF ILLINOIS.

## KNIFE-HEAD FOR HARVESTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 745,947, dated December 1, 1903.

Application filed August 27, 1903. Serial No. 170,934. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WILSON, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Knife-Heads for Harvesting-Machines, of which the following is a specification.

The object of this invention is to construct a knife-head for harvesting-machines in which the pitman is held in connection with the knife-head by a U-shaped spring exerting its force on the cap portion of the head and in making a solid pitman-head having the ball portion thereof located between two side bars in order that the ball may be supported at two opposite points.

In the accompanying drawings, Figure 1 is a plan view of my improved knife-head. Fig. 2 is a side elevation. Fig. 3 is a lengthwise vertical section on dotted line *a*, Fig. 1. Fig. 4 is a plan view of the pitman-head. Fig. 5 is a vertical transverse section on dotted line *b*, Fig. 1.

The base portion of the knife-head comprises the plate 1 and the lower section 2 of the receptacle for the pitman-head. This lower section has a center semispherical cavity 3 and two ears 4.

To the plate 1 is secured the knife 5, and beneath the knife and plate is secured the knife-back 6.

To the lower section 2 is pivoted a cap 7 by the extension 8, located between the ears 4 and connected by the pin 9. This cap has a semispherical cavity 10 and two upwardly-projecting lugs 11.

A U-shaped spring 12 has one branch located in an opening 13 in the lower section 2 and held against displacement by the pin 14 and the projection 15. The other arm of this spring may be placed between the lugs 11 of the cap 7, thereby holding the cap in connection with the lower section.

The pitman-head (shown at Fig. 4) comprises the arms 16, connected by a ball 17, and the free ends of the arms connected to the pitman 18. By constructing the pitman-head of a single piece the ball is supported at two opposite points, so that the force exerted by the pitman will be imparted centrally to the ball, thereby preventing the side strain exerted in pitmen having the ball supported from one side only. By removing the free end of the spring from its engagement with the cap the cap can be moved on its pivotal connection, thereby permitting the removal of the ball of the pitman-head, which will allow the knife to be removed.

The base 2 has a cavity 19, within which is placed packing 20 and upon which rests a projection 21, extending from the cap portion. As the cavity 10 in which the ball 17 is placed becomes enlarged by wear some of the packing in the cavity 19 can be removed in order that the cap may come closer to the ball, thereby insuring a close connection.

I claim as my invention—

1. A pitman connection comprising a base portion, a movable cap portion, and a spring supported by the base portion and capable of being moved into engagement with the cap portion.

2. A pitman connection comprising a base portion, a movable cap portion, and a U-shaped spring supported by the base portion and capable of being moved into engagement with the cap portion.

3. A pitman connection comprising a base portion, a movable cap portion and a spring supported by the base portion and capable of being moved into engagement with the cap portion, one of the portions provided with a recess and the other portion with a projection adapted to enter the recess, and packing placed in the recess.

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