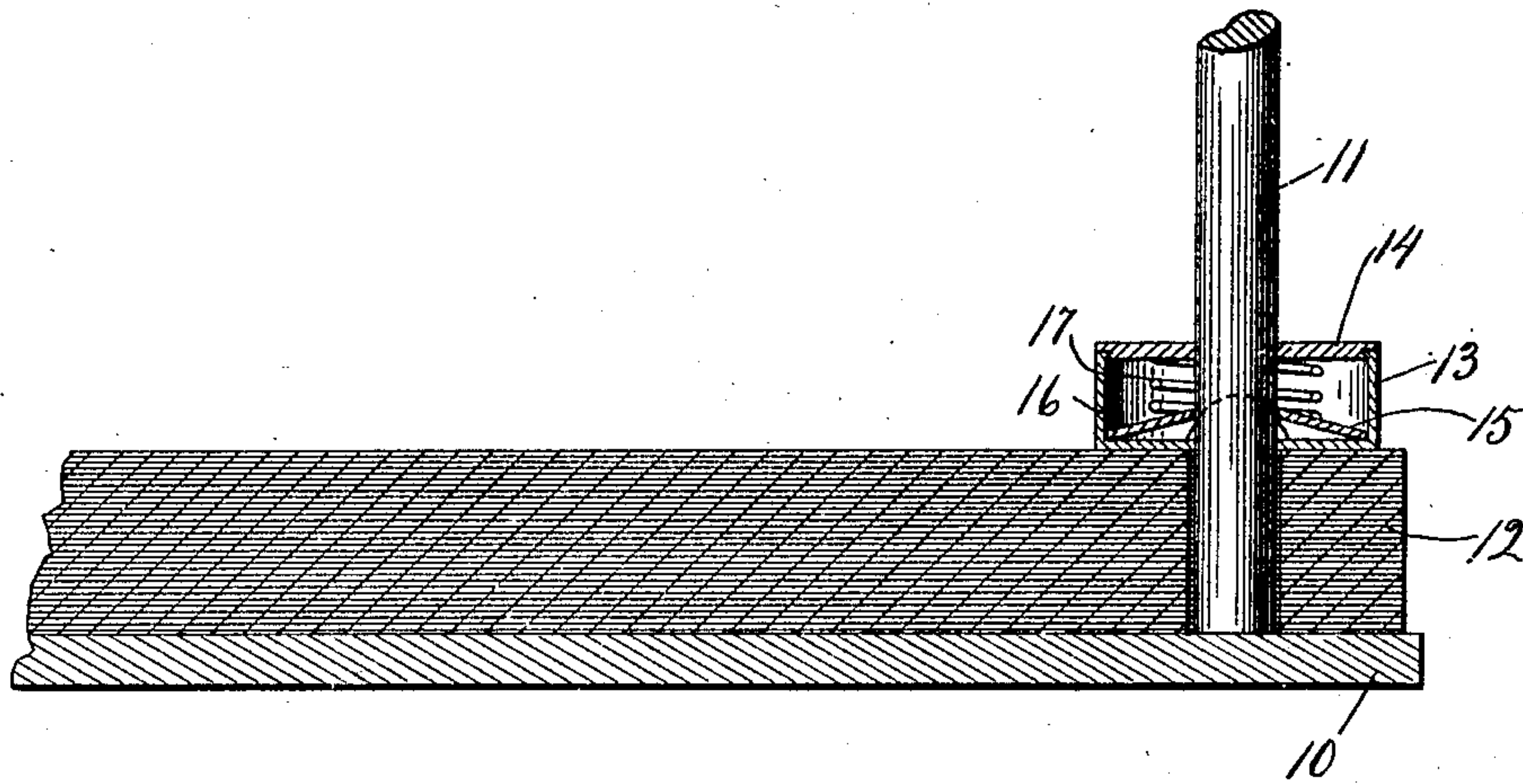


No. 836,739.

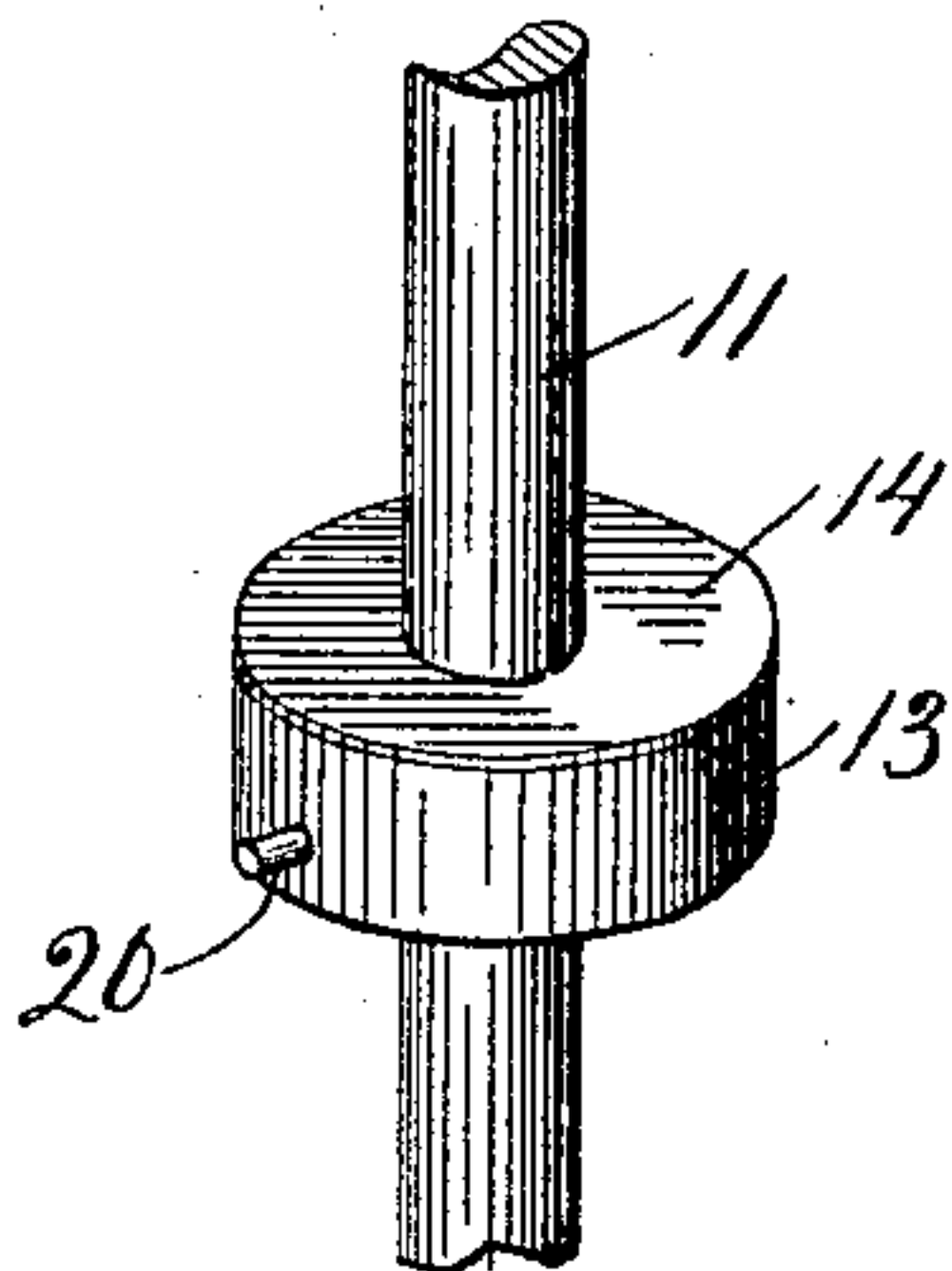
PATENTED NOV. 27, 1906.

J. C. DAWSON.  
CLUTCH.

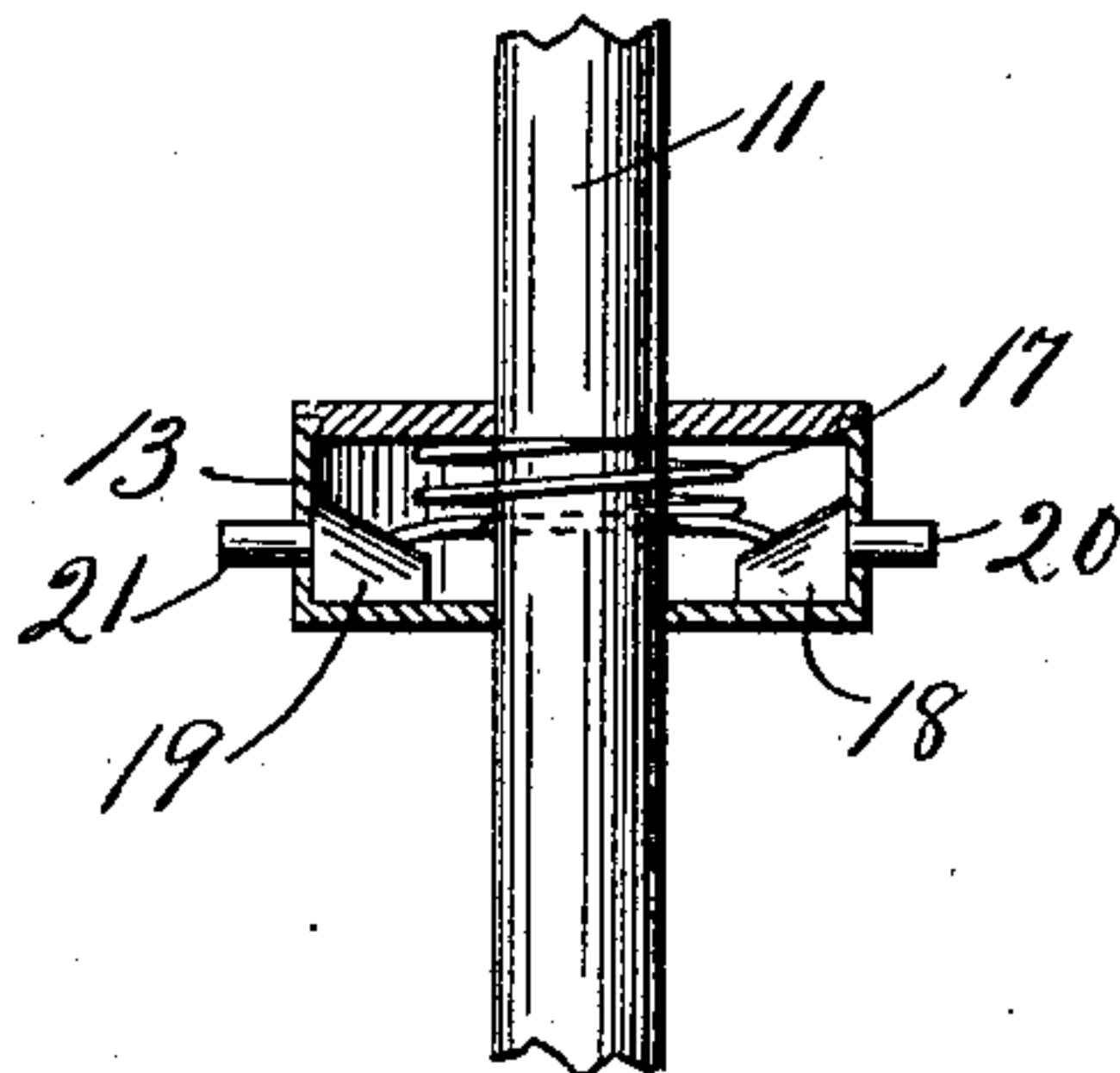
APPLICATION FILED APR. 30, 1906.



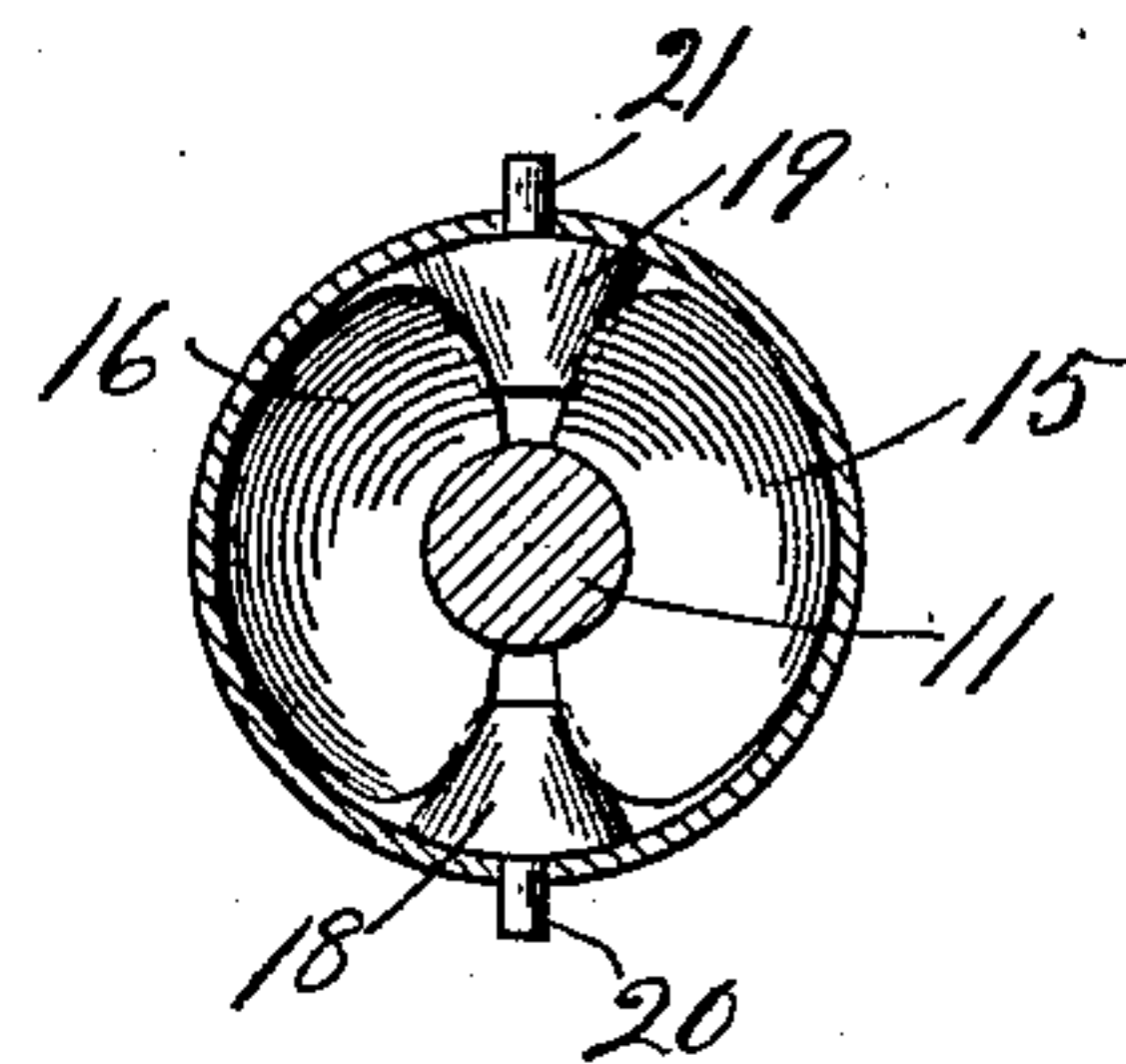
*Fig. 1*



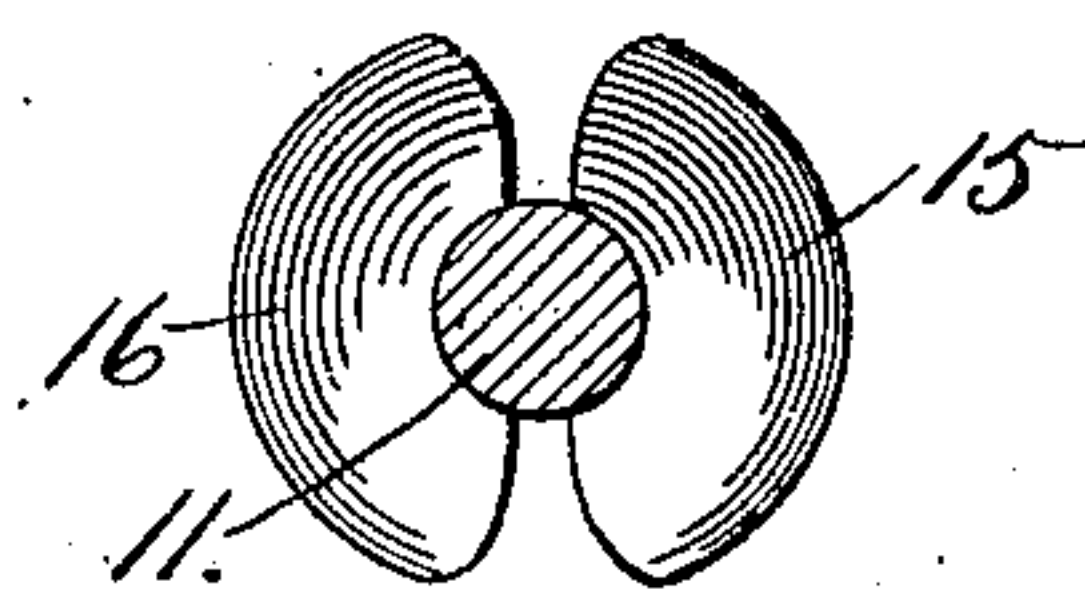
*Fig. 3.*



*Fig. 2.*



*Fig. 4.*



*Fig. 5.*



*Fig. 6.*

*Witnesses:*

*W. H. Cotton*

*Charles B. Gillson*

*Inventor:*

*James C. Dawson*

*By Louis K. Gieson*  
*Atty*



# UNITED STATES PATENT OFFICE.

JAMES C. DAWSON, OF ST. LOUIS, MISSOURI, ASSIGNOR TO SIEBER & TRUSSELL MANUFACTURING COMPANY, A CORPORATION OF MISSOURI.

## CLUTCH.

No. 836,739.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed April 30, 1906. Serial No. 314,432.

*To all whom it may concern:*

Be it known that I, JAMES C. DAWSON, a citizen of the United States, and a resident of the city of St. Louis, State of Missouri, have  
5 invented certain new and useful Improvements in Clutches, of which the following is a specification and which are illustrated in the accompanying drawings, forming a part thereof.

10 The invention relates to a clutch-block adapted to be slidingly mounted upon a rod and being provided with clutch members normally holding against movement in one direction, the invention consisting in the mechanism hereinafter described and which is illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal central section of the clutch as applied to the post of a loose-leaf file-binder. Fig. 2 is a longitudinal central section of the clutch on a diameter perpendicular to that on which Fig. 1 is taken, the block being applied to a rod. Fig. 3 is a detail perspective showing the block applied to a rod. Fig. 4 is a plan section of the clutch-block and rod, the spring of the clutch being removed. Fig. 5 is a similar view, the releasing elements being omitted; and Fig. 6 is a detail of one of the clutch-releasing elements.

The clutch is adapted to be used in connection with any rod for the purpose of limiting longitudinal movement in one direction and is illustrated in connection with the rod or post of a file-binder, Fig. 1 showing a detail of such binder, comprising a base-plate 10, the post 11, and a block 12 of leaves mounted thereon, the clutch serving as the means for binding the leaves together and to the base.

40 The clutch-block comprises a chambered box 13, having a cover 14 permanently secured thereto, as by the compression of the upper edge of the walls of the box into an annular channel in the rim of the cover, as  
45 shown. The block is apertured longitudinally and preferably centrally to receive the post or rod upon which it is to be used. The clutch members 15 16 are segmental in form, their outer ends conforming to the curvature  
50 of the inner surface of the wall of the casing and fitting into the angle at the bottom thereof and extending, as shown, through approximately one hundred and sixty degrees.

The inner edges of the clutch-plates are re-

cessed concentrically with their outer edges 55 to fit against the rod, the radial length of the plates being greater than the distance between the rod and the wall of the casing, so that the plates are inclined relatively to the axis of the rod. The wall of the aperture of  
60 the plates is chamfered to bring it to an edge at the upper surface of the plate.

A spring of any desired form, as shown being helical and designated in the drawings by the numeral 17, reacts between the end of the  
65 box and the upper faces of the clutch-plates, tending to force the latter into engagement with the rod 11—that is to say, tending to force them to a position perpendicular to this rod. Pressure upon the box in line with  
70 the rod and tending to bring the two plates into alinement causes them to securely grip the rod and positively lock the box against movement. Pressure upon the box in the  
75 opposite direction tends to spread the plates in opposition to the pressure of the spring, and hence releases them from the rod and permits the block to freely move.

The clutch-plates may be disengaged from the rod for the purpose of allowing free move-  
80 ment of the block by the use of releasing elements 18 19 in wedge form, located at opposite sides of the chamber of the casing, each engaging the under faces of both of the  
85 clutch-plates. Each of these releasing elements is provided with a stem, as 20 21, projecting through a suitable aperture in the wall of the casing. Pressure upon these  
90 stems will force the two releasing elements inwardly, and thus raise and release the clutch-plates. The pressure of the spring 17 will force the releasing elements outwardly to their normal position.

I claim as my invention—

1. In a clutch-block, in combination, a 95 longitudinally-apertured chambered casing, a pair of clutch-plates bearing against opposite sides of the casing and at the same end thereof, such plates being of greater radial  
100 width than the distance from the side of the casing to its axial aperture, a spring reacting between the upper faces of the plates and the opposite end of the casing, and means for moving the plates in opposition to the spring.

2. In a clutch-block, in combination, a 105 longitudinally-apertured chambered casing, a pair of clutch-plates bearing against opposite sides of the casing and at the same end



thereof, such plates being of greater radial width than the distance from the side of the casing to its axial aperture, a spring reacting between the upper faces of the plates and the  
5 opposite end of the casing, and a wedge-block engaging the inner edges of both plates and acting in opposition to the spring.

3. In a clutch-block, in combination, a longitudinally-apertured chambered casing,  
10 a pair of clutch-plates bearing against opposite sides of the casing and at the same end thereof, such plates being of greater radial width than the distance from the side of the casing to its axial aperture, a spring reacting  
15 between the upper faces of the plates and the opposite end of the casing, and a wedge-block engaging the inner edges of both plates and acting in opposition to the spring and having a stem projecting through the side of  
20 the casing.

4. In a clutch-block, in combination, a longitudinally-apertured chambered casing, a pair of clutch-plates bearing against opposite sides of the casing and at the same end  
25 thereof, such plates being of greater radial

width than the distance from the side of the casing to its axial aperture, a spring reacting between the upper faces of the plates and the opposite end of the casing, and a pair of wedge-blocks engaging the inner edges of the  
30 plates and acting in opposition to the spring, each wedge-block having a stem projecting through the side wall of the casing.

5. In a clutch-block, in combination, a longitudinally-apertured chambered cylindrical casing, a pair of segmental clutch-  
35 plates bearing against the side wall of the casing at its juncture with one end thereof, the radial width of each plate being greater than the distance from the casing-aperture  
40 to its side wall, a spring reacting between the upper face of the plates and the end of the casing, and a pair of wedge-blocks engaging the inner edges of the plates and acting in opposition to the spring.

JAMES C. DAWSON.

Witnesses:

ROBT. H. CONE, Jr.,  
F. W. RISQUE.

It is hereby certified that Letters Patent No. 836,739, granted November 27, 1906, upon the application of James C. Dawson, of St. Louis, Missouri, for an improvement in "Clutches," were erroneously issued to "Sieber & Trussell Manufacturing Company, a corporation of Missouri," as assignee of said invention; whereas said Letters Patent should have been issued to the inventor, the said *James C. Dawson*, as owner of the entire interest in said invention; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 11th day of December, A. D., 1906.

[SEAL.]

F. I. ALLEN,  
*Commissioner of Patents.*