No. 844,443. PATENTED FEB. 19, 1907.

J. C. DAWSON.

CLUTCH.

APPLICATION FILED APR. 30, 1906.

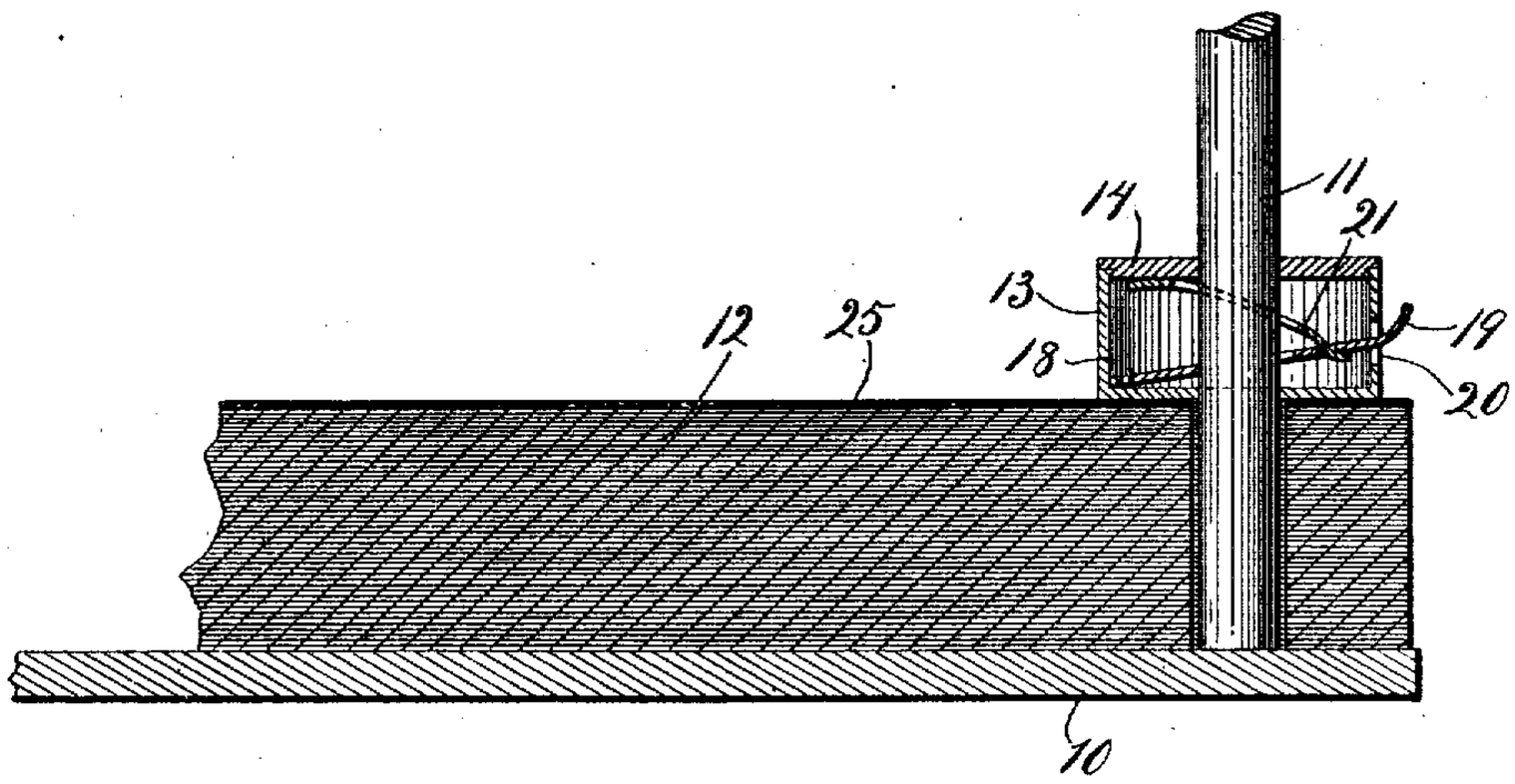

Fig. 1.

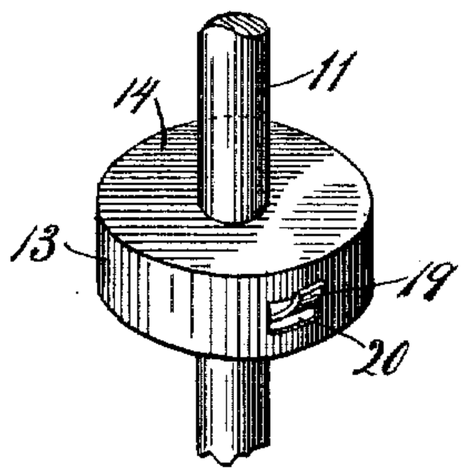

Fig. 2

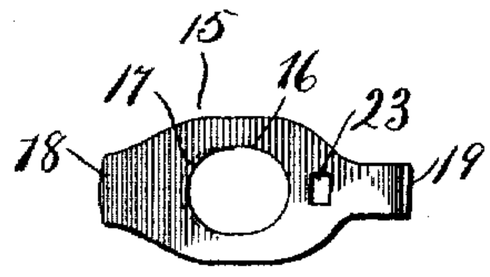

Fig. 3.

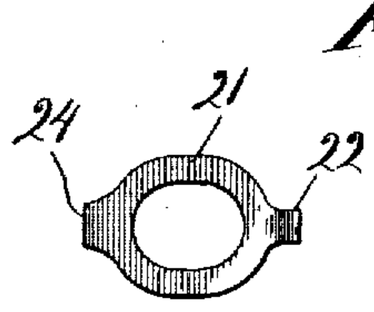

Fig. 4.

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JAMES C. DAWSON, OF ST. LOUIS, MISSOURI.

CLUTCH.

No. 844,443. Specification of Letters Patent. Patented Feb. 19, 1907.

Application filed April 30, 1906. Serial No. 314,430.

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 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.

The invention relates to a clutch in the form of a block or box adapted to run on a rod and while sliding freely in one direction firmly grips the rod when pressed in the opposite direction.

The invention consists in a box apertured, preferably, on its axis to fit upon a rod, a clutch-plate housed within and controllable from without the box, and a spring intended to throw the clutch in its engaging position.

The invention is serviceable in any situation in which it may be desired to mount a clutch-block upon a rod. It is well adapted for use on and is shown in connection with loose-leaf files, the accompanying drawings representing, in—

Figure 1, a detail sectional view of such a file, the clutch being shown in central longitudinal section; Fig. 2, a perspective of the clutch as applied to a rod; and Figs. 3 and 4, details of the clutch-plate and spring, respectively.

As showing one use to which the invention may be applied there is represented in Fig. 1 a base-plate 10 of a loose-leaf file, from which plate rises a post 11, upon which the sheets 12 to be filed are impaled in the usual manner. The clutch is mounted on the rod 11 and is free to slide downwardly thereupon, but holds against upward movement until purposely released. By pushing the clutch-block down upon the sheets the latter may be bound with as tight a grip as may be desired.

The clutch is in the form of a box 13, having a cover-plate 14, which is secured in any desired manner, as shown by being provided with an annular channel in its periphery, the upper edge of the side wall of the box being forced into this channel. The clutch-plate 15 is in yoke form, having an elongated aperture 16 for loosely receiving the rod 11, one wall, as 17, of this aperture being undercut to form a biting edge. The inner end 18 of the clutch-plate rests against the side wall of the box 13 adjacent its bottom, and the outer end 19 projects through an aperture 20 in the side wall of the box and serves as a thumb-piece, by means of which the clutch may be released.

A spring 21, which, as shown, is in the form of a yoke-plate apertured to loosely receive the post 11, has a finger 22, which sets through an aperture 23 in the plate 15, the opposite end 24 of the spring bearing against the cover 14 of the box, and as the spring reacts between this cover and the clutch-plate 15 the biting edge 17 of the latter is forced into engagement with the rod 11.

When the clutch-block is used on a vertical post, as shown, gravity may, if desired, be depended upon to bring the clutch member into engagement with the rod. The spring when used may take any desired form, though that shown is simple to manufacture, durable, and not liable to displacement.

As the clutch-plate is somewhat inclined, one end resting upon the bottom of the box 13 and the other extending through an aperture in the side wall thereof, the box may be moved downwardly upon the rod 11. The biting edge 17 being at the upper face of the plate 15, movement of the box in the opposite direction is prevented by the firm grip of this edge upon the post 11, the strain being exerted through the plate to the edge of the box 13, against which the latter impinges. Slight upward pressure upon the end 19 of the clutch-plate will swing it about the point of engagement of its end 18 with the box as a pivot, moving the biting edge out of engagement with the post.

In applying the clutch-block to a file-binder there may or may not be used on top of the sheets to be bound a runner-board or cover, as shown at 25.

I claim as my invention—

1. In combination, a casing having alined apertures in opposite walls, an apertured clutch-plate extending obliquely across the line of the apertures and having a fixed bearing at one end against one of the apertured walls of the casing, and a spring-plate engaging the clutch member and bearing against the opposite apertured wall of the casing.

2. In combination, a casing having alined apertures in opposite walls a clutch-plate having a fixed bearing against one of the apertured walls of the casing and extending obliquely across the casing and having an aperture in line with the wall-apertures and a socket between such aperture and its free end, and a spring-plate having a tongue en-

gaging such socket and an aperture in line with the named casing-aperture and bearing at its free end against the wall of the casing opposite that against which the clutch plate bears.

3. In combination, a base, a rod rising from the base, a follower running on the rod, a chambered casing independent of the follower apertured to run on the rod, and a clutch member within the casing for gripping the rod.

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