

(No Model.)

A. J. DAVIS.
FRICTIONAL HOISTING WHEEL.

No. 480,905.

Patented Aug. 16, 1892.

Fig. 1.

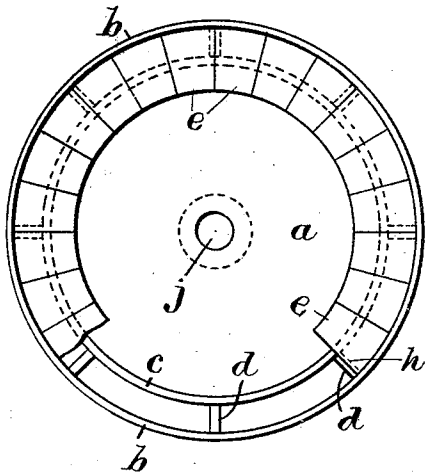


Fig. 2.

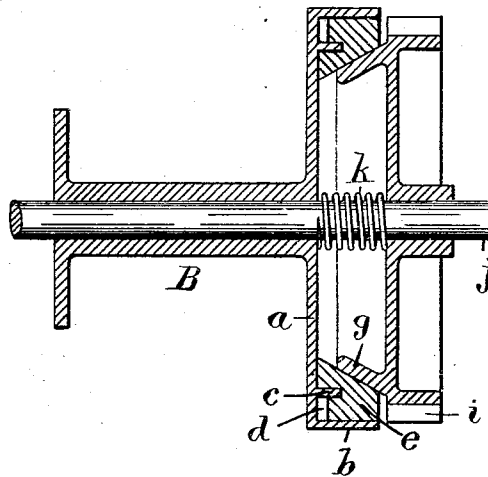


Fig. 3.

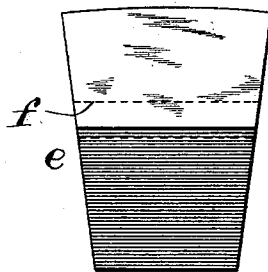


Fig. 4.

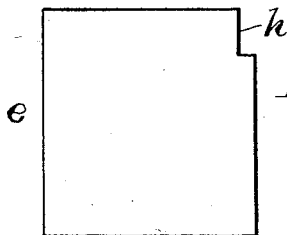
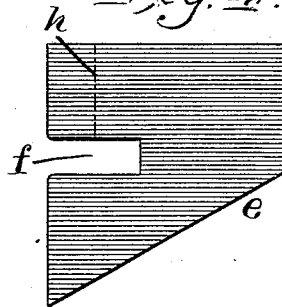


Fig. 5.

Attest:
Wm. H. H. Jr.
L. Lee.

Inventor.
A. J. Davis, per
Crane & Miller, attys.

UNITED STATES PATENT OFFICE.

ALBERT J. DAVIS, OF MOUNT TABOR, NEW JERSEY.

FRICTIONAL HOISTING-WHEEL.

SPECIFICATION forming part of Letters Patent No. 480,905, dated August 16, 1892.

Application filed December 22, 1891. Serial No. 415,874. (No model.)

To all whom it may concern:

Be it known that I, ALBERT J. DAVIS, a citizen of the United States, residing at Mount Tabor, Morris county, New Jersey, have invented certain new and useful Improvements in Frictional Hoisting-Wheels, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The object of this invention is to furnish a cheap and effective means of securing wooden blocks within the rim of a friction-clutch without the use of dovetails or any undercut pieces in the casting of the rim.

In the present construction the blocks are fitted within an annular rim and are each of them notched transversely to fit a narrow ring cast upon the clutch-plate parallel with the rim. Radial ribs are provided at intervals between the ring and the rim to drive the blocks with the clutch-plate, and the blocks are notched upon one edge where they set in contact with such ribs.

The invention will be understood by reference to the annexed drawings, in which—

Figure 1 is a face view of the clutch-plate and rim with a portion of the blocks removed. Fig. 2 is a longitudinal section of a hoisting-drum provided with my improved clutch, the parts being shown in section where hatched. Fig. 3 shows the outer side of one of the blocks upon a larger scale drawn the natural size. Fig. 4 is a side view of the same, and Fig. 5 is a plan of the outer edge of the block as it is notched to fit one of the radial ribs.

a is the clutch-plate, which is shown in the drawings for illustration attached to the barrel B of a hoisting-drum. The plate is provided with the laterally-projecting rim *b*, inside of which the blocks *e* are applied. The rim *b* is made of the same height as the blocks to sustain the same firmly, and a ring *c* is projected from the plate *a* only a portion of such height, so as to require merely a notch in the block to fit over the same, as shown at *f* in Fig. 4. Radial ribs *d* connect the ring with the rim at intervals, eight of such ribs being shown in Fig. 1. The blocks *e* are cut

of suitable dimensions for a certain number to fit between each pair of ribs, and a notch *h*, one-half the thickness of the ribs, is cut out of the sides of the blocks adjacent to the ribs. The notches *f* are readily formed in the blocks by means of a drunken circular saw, and the blocks are thus cheaply prepared to fit within the rim. When jammed in the rim, they are firmly held from movement in every direction and the inner surface is turned into a conical recess to fit a metallic cone *g*, which is pressed into the same by any well-known means.

In Fig. 2 the cone is shown attached to a gear-wheel *i*, which is mounted upon a shaft *j*, with the barrel B, and a spring *k* is shown inserted between the plate *a* and the hub of the gear-wheel to press the metallic cone normally out from the blocks.

It will be seen by reference to Fig. 2 that the rim *b*, the ring *c*, and the ribs *d* all project at right angles from the plate *a*, and are thus adapted to mold with the utmost facility, the construction requiring no loose parts in the pattern nor any special labor in molding the same to cast the clutch. Neither do the blocks require any irregular cutting to fit dovetail cavities or recesses, and they are thus made and applied to the casting of the rim very cheaply. The entire clutch is therefore cheap and simple in construction and entirely effective in operation.

Having thus set forth the nature of my invention, what I claim herein is—

In a friction-clutch, the combination, with the flange *a*, having the rim *b* and the ring *c*, connected with the rim by ribs *d*, of the blocks *e*, provided with notches *f* to fit the ring *c* and fitted between the ribs *d*, as set forth, and the metallic cone *g*, fitted within the blocks, as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALBERT J. DAVIS.

Witnesses:

THOS. S. CRANE,
L. LEE.