

No. 653,313.

Patented July 10, 1900.

W. H. F. RAIFSNYDER.

SPLIT DISK FOR HOLDING PULLEYS TO SHAFTS.

(Application filed May 19, 1900.)

(No Model.)

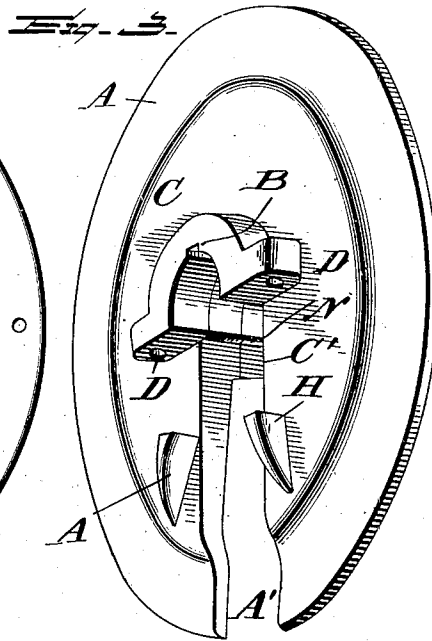
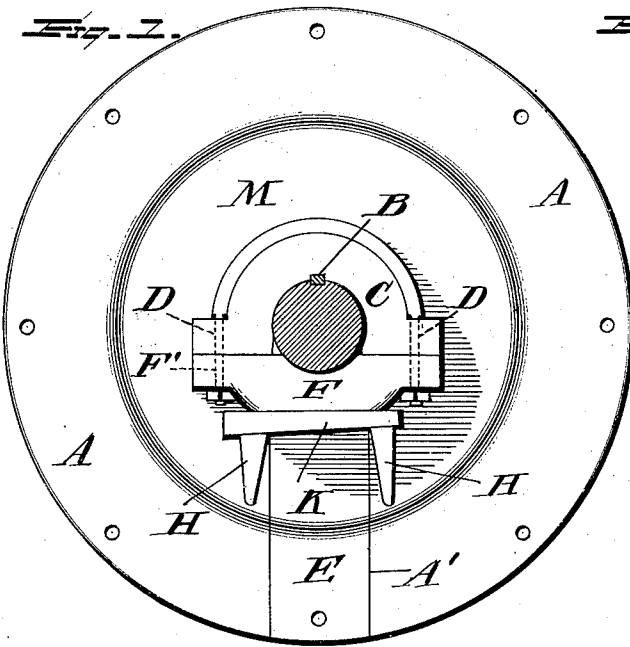
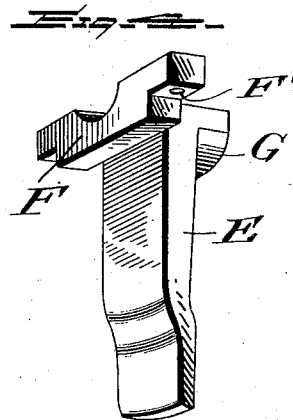
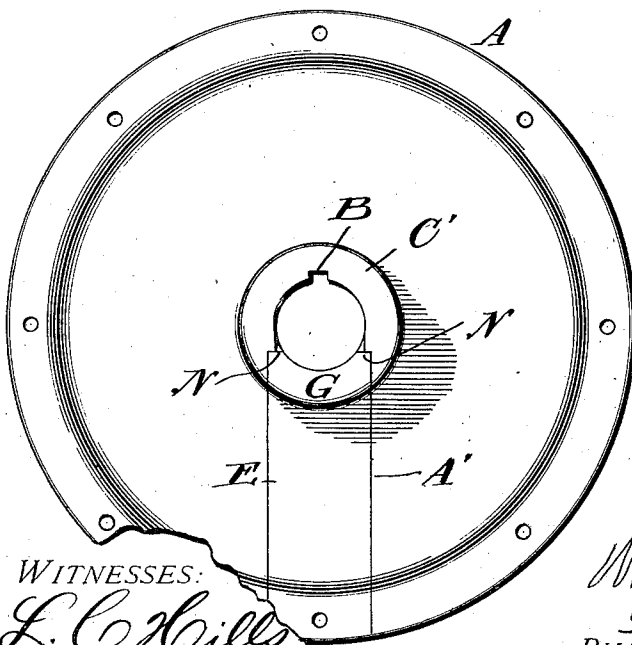


Fig. 2.



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SPLIT DISK FOR HOLDING PULLEYS TO SHAFTS.

SPECIFICATION forming part of Letters Patent No. 653,313, dated July 10, 1900.

Application filed May 19, 1900. Serial No. 17,275. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. F. RAIFS-
SNYDER, a citizen of the United States, resid-
ing at Sackett, in the county of Elk and State
5 of Pennsylvania, have invented certain new
and useful Improvements in Split Disks for
Holding Pulleys to Shafts; and I do declare
the following to be a full, clear, and exact de-
scription of the invention, such as will enable
10 others skilled in the art to which it appertains
to make and use the same, reference being
had to the accompanying drawings, and to the
letters of reference marked thereon, which
form a part of this specification.

15 This invention relates to new and useful
improvements in devices for holding pulleys
and causing the same to rotate with a shaft-
ing, and especially to the provision of a split
disk which is adapted to be keyed to a shaft
20 and fastened to the face of the pulley or
wheel, means being provided to hold the disk
to the shaft.

More specifically, the invention consists in
a split disk adapted to engage a shaft to
25 which it is keyed and the provision of a
clamping-block adapted to partially surround
the shaft and held to the disk by means of a
clevis and a wedged block held between the
clamping-block and lugs on the face of the
30 disk.

To these ends and to such others as the in-
vention may pertain the same consists, fur-
ther, in the novel construction, combination,
and arrangement of parts, as will be herein-
35 after more fully described and then specifi-
cally defined in the appended claims.

The invention is clearly illustrated in the
accompanying drawings, which, with the let-
ters of reference marked thereon, form part
40 of this application, and in which drawings—

Figure 1 is a side elevation of my improved
split disk for holding a pulley to rotate with
a shaft. Fig. 2 is an elevation of the rear
face of the disk, which is adapted to be held
45 against the face of the pulley. Fig. 3 is a
perspective view of the disk with clamping-
block removed, and Fig. 4 is a perspective
view of the clamping-block.

Reference now being had to the details of
50 the drawings by letter, A designates the split
disk, which is recessed in from its circum-
ference, as at A', the inner end of said recess

terminating at a location slightly beyond the
center of the disk and is rounded to form a
bearing which engages a shaft. At the ex- 55
treme end of said recess is a contracted slot
B, in which a key is adapted to be inserted,
which key is also designed to engage a recess
in the shaft to which the disk is to be keyed.
On opposite faces of said disk are the shoul- 60
ders C and C', said shoulder C having aper-
tures D through the laterally-projecting por-
tions of said shoulder. The outer circum-
ference of the shoulders C and C' are prefer-
ably curved, as shown. 65

E is a segment forming a portion of the
disk, which is removable, and when adjusted
in its place in the recessed portion of the disk
is adapted to fill up the space formed by re- 70
cessing the disk, and the inner end of said
segment is concaved and has shoulders F and
G, the former of which is concaved and has
flat faces adapted to rest upon the flat faces
of the shoulder C, and the laterally-project-
ing portions of said shoulder F has apertures 75
F', which when the said segment is adjusted
in place register with the apertures D. On
each side of the recess in said disk, on one
face of the latter, are the lugs H, and after
the segment E has been adjusted in place in 80
said recess a wedge-shaped member K is
adapted to be inserted between the flattened
ends of said lugs and the outer flattened face
of the shoulder F. In order to hold said seg- 85
ment in place, a U-shaped bolt M is passed
about the curved circumference of the shoul-
der C and its threaded ends passed through
the registering apertures D and F', respec-
tively, in the shoulders C and F, and by the
90 use of tightening-nuts on the threaded ends
of said bolt the segment-block may be se-
curely held to the disk and securely fastening
said disk to the shaft. The disk may be fas-
tened to the wheel or pulley by means of bolts,
95 screws, or other fastening means, and when
thus secured to the pulley or wheel is caused
to rotate with the disk, as will be readily un-
derstood.

On the opposite walls of the recess A' are
shoulders N, which extend across the shoul- 100
ders C and C', and upon said shoulders N the
opposite edges of the flanged end of said seg-
ment-block E are adapted to rest, and when
the segment is held on said shoulders the cir-

cular aperture formed by the recessed end of the disk and said segment will embrace the circumference of a shaft.

From the foregoing it will be observed that the disk may be readily fitted to any wheel or shafting, either with slot or without, and as easily removed therefrom.

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

1. A device for holding a pulley to rotate with a shaft, comprising a disk, recessed in from its circumference, a segment-block which is concaved at its inner end, and adapted with the inner curved end of said recess to embrace a shaft, a U-shaped bolt and tightening-nuts for holding said segment to the disk, projections on the face of said disk, and a wedge-shaped block interposed between a shoulder on said segment, and said projections, as set forth.

2. A device for holding pulley-wheels to rotate with the shaft, comprising a disk recessed in from its circumference and terminating in a curved shoulder or flange on the opposite faces of said disk, a segment-block having flanges projecting from its opposite faces, and recessed at its inner end, a U-shaped bolt passing about one of the flanges of the disk, and passing through registering apertures in

the flanges of the disk and segment, threaded nuts mounted on said bolt, lugs on the face of the disk, and a wedge-shaped member interposed between said lugs and the flat face of the flanged portion of the segment, and a key for holding the disk to the shaft.

3. A device for holding a pulley to rotate with the shaft, comprising the disk recessed in from its circumference, flanges on opposite faces of said disk, which are concaved, a segment-block having flanges on its opposite faces, and concaved on its inner end, the flanges of said segment-block adapted to be held flat against the faces of the flanges of said disk, the lower end of the segment adapted to rest on shoulders on opposite walls of the recessed portion of the disk, lugs on the face of the disk, on opposite sides of said recess, the wedge-shaped member interposed between the ends of said lugs and the flattened portion of one of the flanges of said segment, and the U-shaped bolt for holding the segment to the disk, as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. F. RAIFSNYDER.

Witnesses:

J. M. MITCHELL,
JAMES CAMPBELL.