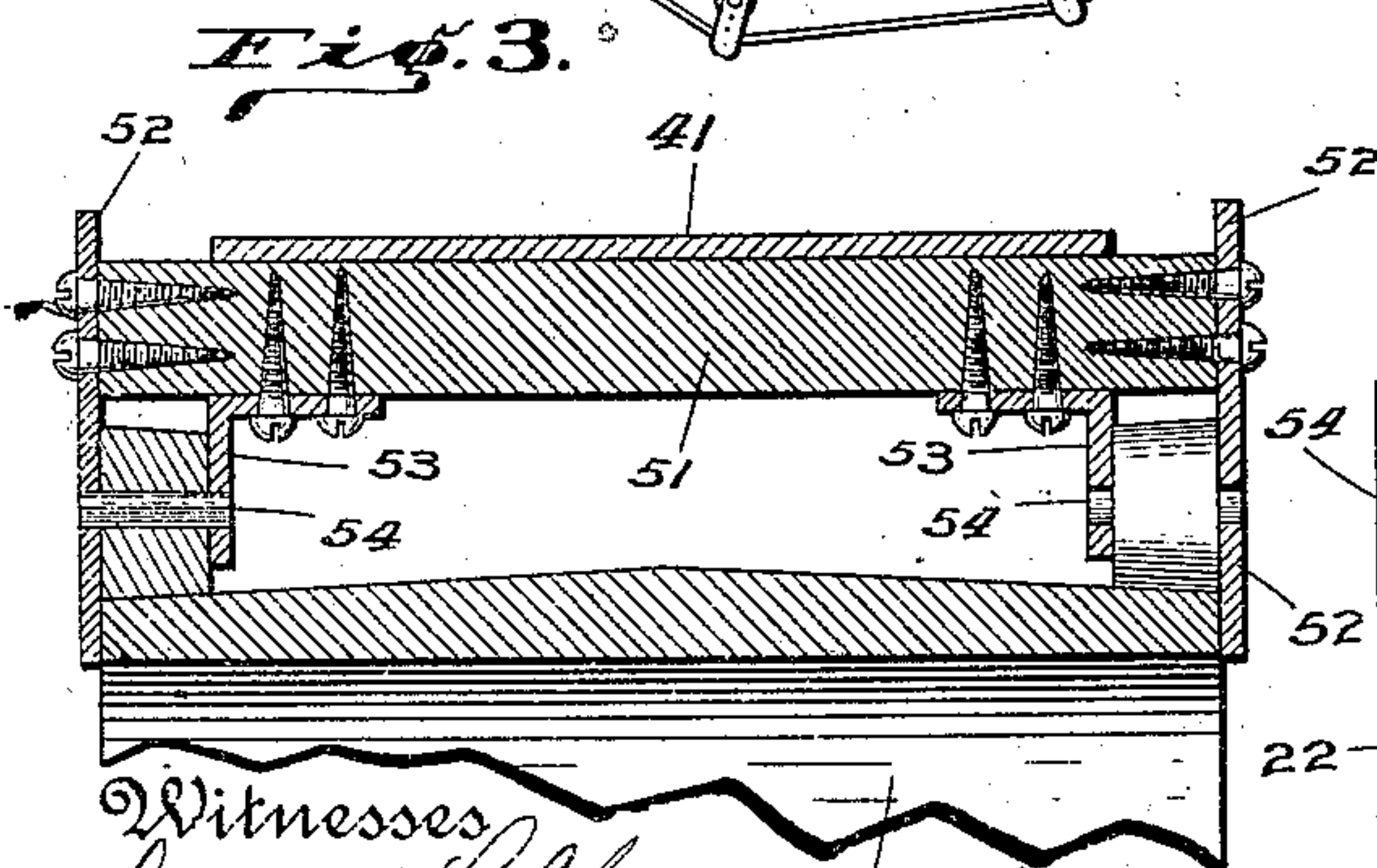
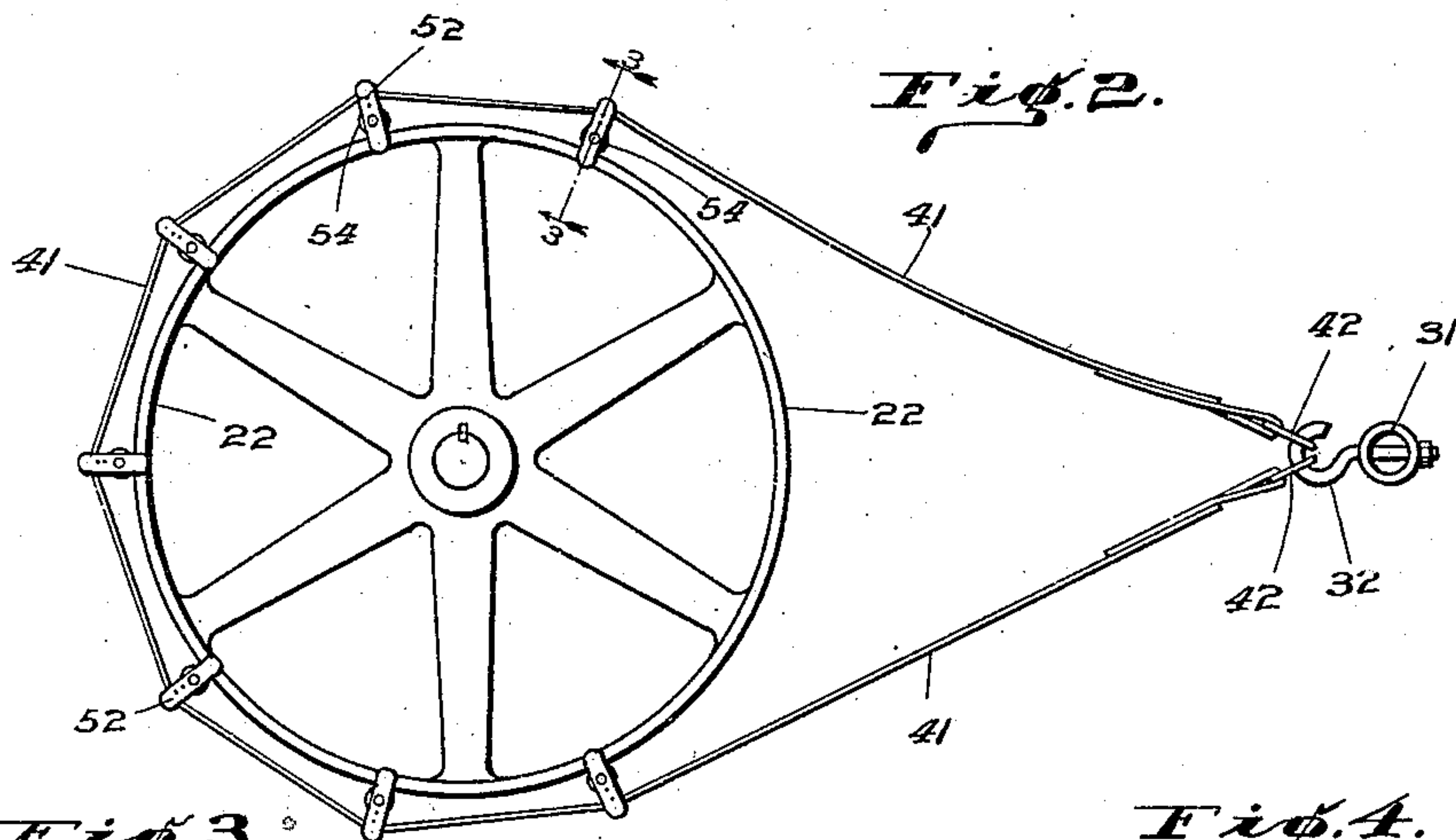
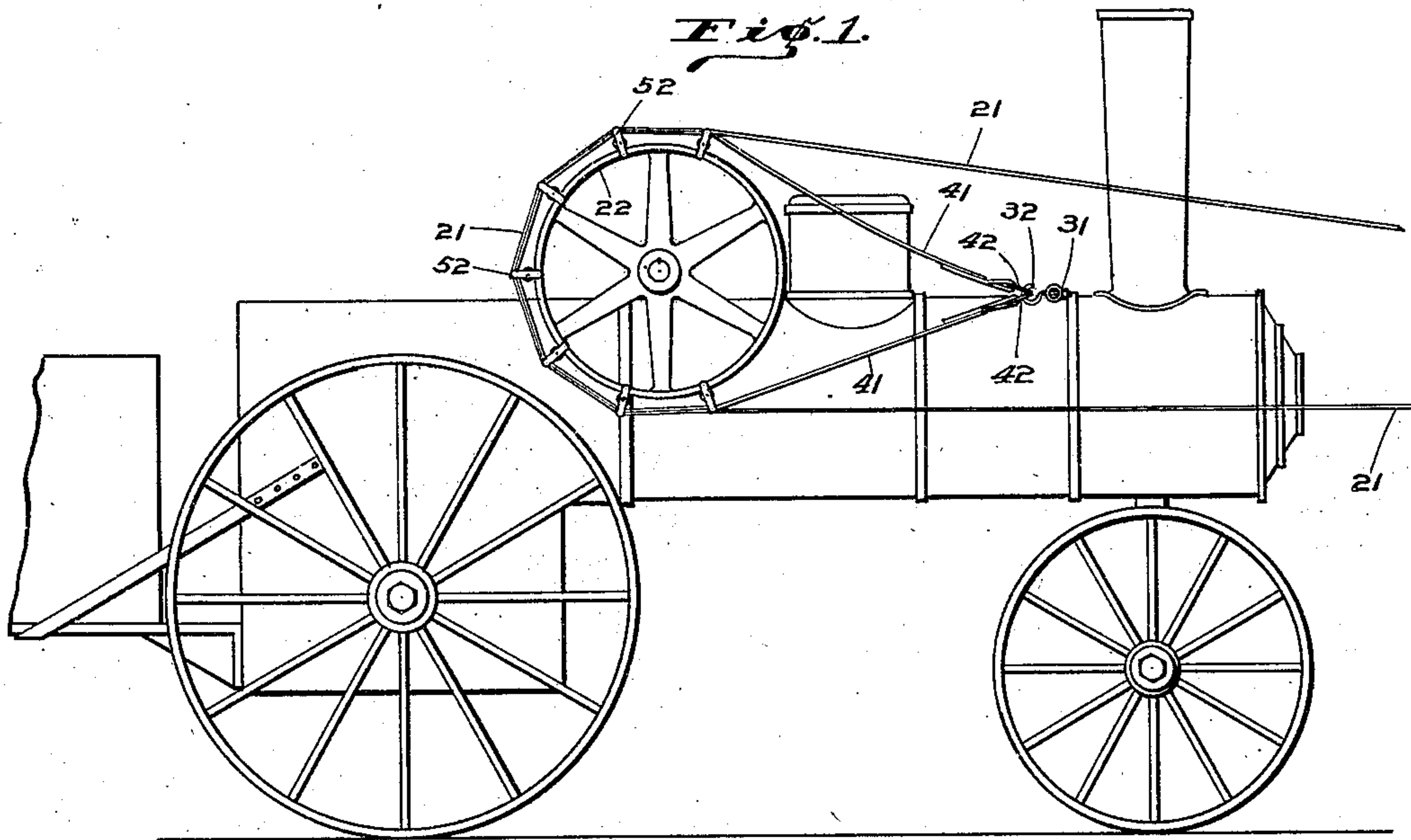


No. 843,014.

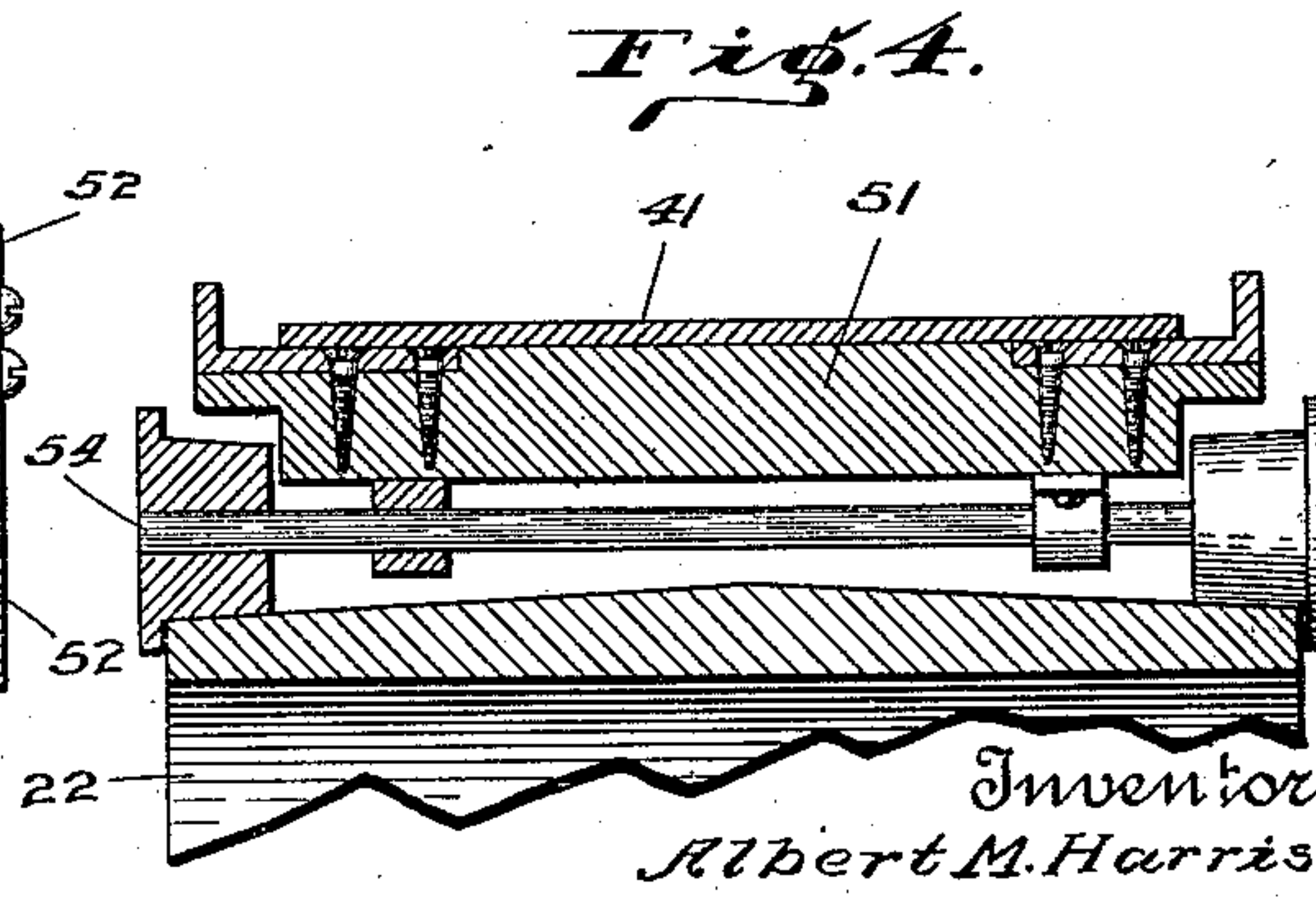
PATENTED FEB. 5. 1907.

A. M. HARRIS.
BELT SUPPORT.

APPLICATION FILED JUNE 21, 1906.



Witnesses
Frank A. Fable
Thomas H. Mc Means



Inventor
Albert M. Harris

BY *Bradford V. Hood,*
Attorneys

UNITED STATES PATENT OFFICE.

ALBERT M. HARRIS, OF SOUTH BEND, INDIANA.

BELT-SUPPORT.

No. 843,014.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed June 21, 1906. Serial No. 322,687.

To all whom it may concern:

Be it known that I, ALBERT M. HARRIS, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Belt-Supports, of which the following is a specification.

My present invention consists in certain improvements upon that forming the subject-matter of the application, Serial No. 278,973, of Alvah E. Bilby, filed September 18, 1905, whereby the band or strip constituting the belt-support is rendered more efficient, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a side elevation of a traction-engine and a fragment of a main driving-belt (such as is employed for driving a threshing-machine therefrom) with a device embodying my said invention interposed between the fly-wheel or driving-pulley of the engine and said belt; Fig. 2, a view on a larger scale of the fly-wheel and belt-support; Fig. 3, a detail transverse sectional view at the point indicated by the dotted line 3 3 of Fig. 2; and Fig. 4, a view similar to Fig. 3, but illustrating an alternative form of rollers and mountings.

The engine and the belt are or may be of any usual or desired form or construction and not being peculiar to my present invention will not be further described herein except incidentally in describing said invention.

The belt 21 is driven from the band wheel or pulley 22 of the engine in an ordinary and well-known manner. To the engine is also attached an arm 31, which extends out substantially parallel with the shaft on which the belt-pulley is mounted and is provided with suitable means, as a hook 32, for connecting the band or strip of the belt-support thereto. A flexible band or strip 41 extends from this arm around the pulley, the ends of said band being detachably connected to said arm, usually by means of said hook 32 and rings 42 on the ends of said band or strip, as shown. Said band or strip is provided with devices which in use are interposed between it and the face of the belt-pulley. Said devices consist of transverse bars 51, to which the band or strip is immediately connected, and rollers mounted on said bars, which are in immediate contact with the sur-

face of the belt-pulley when the support is in use. The rollers are mounted in suitable housings composed of the parts 52 and 53 and short axles 54, as shown in Fig. 3, or instead of the housings and short shafts the pulleys themselves may be flanged and mounted on a longer shaft, as shown in Fig. 4, the result being in either case to hold the structure in place on the belt-pulley and at the same time to permit the said belt-pulley to revolve easily therein with a minimum of friction. In the form shown in Fig. 3 the members 52 form guards or keepers whereby the structure is prevented from moving sideways off the belt-pulley when in use, and in the form shown in Fig. 4 the flanges on the rollers serve the same purpose. In the structure of the Bilby device, above referred to, the transverse members were mere cleats which rested directly upon the surface of the belt-pulley and occasioned a large amount of friction, which by my construction I wholly avoid.

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

1. The combination, with a device of the class described comprising a flexible strip adapted to embrace a pulley and provided at one of its ends with means by which it may readily be detachably held against rotation with the pulley, of transverse bars bearing rollers which come in immediate contact with the surface of the pulley when the device is in use.

2. The combination of a belt-pulley, a belt, and a belt-support, said support comprising a flexible strip adapted to be passed around the belt-pulley, and provided with transverse bars armed with rollers which come in immediate contact with the surface of said pulley when in use, and a device to which one end of said strip may be detachably connected.

3. The combination, with a device of the class described comprising a flexible strip adapted to embrace a pulley and provided at one of its ends with means by which it may readily be detachably held against rotation with the pulley, of transverse bars bearing rollers which come in immediate contact with the surface of the pulley when the device is in use, said rollers being provided with guards whereby the device as a whole is prevented from slipping sidewise off the pulley when in use.

4. The combination of a belt-pulley, a
belt, and a belt-support, said support com-
prising a flexible strip adapted to be passed
around the belt-pulley, and provided with
5 transverse bars armed with rollers which
come in immediate contact with the surface
of said pulley when in use, said rollers being
provided with guards whereby the device as
a whole is prevented from slipping sidewise
10 off the pulley when in use, and a device to

which one end of said strip may be detach-
ably connected.

In witness whereof I have hereunto set my
hand and seal, at South Bend, Indiana, this
16th day of June, A. D. 1906.

ALBERT M. HARRIS. [L. s.]

Witnesses:

CHARLES M. KRIEGHBAUM,
EFFIE M. KRIEGHBAUM.