

No. 838,231.

PATENTED DEC. 11, 1906.

E. H. AHARA.
SHAFT COUPLING.

APPLICATION FILED MAR. 31, 1906.

Fig. 1.

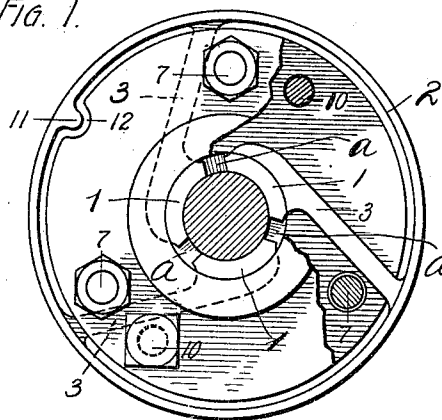


Fig. 2.

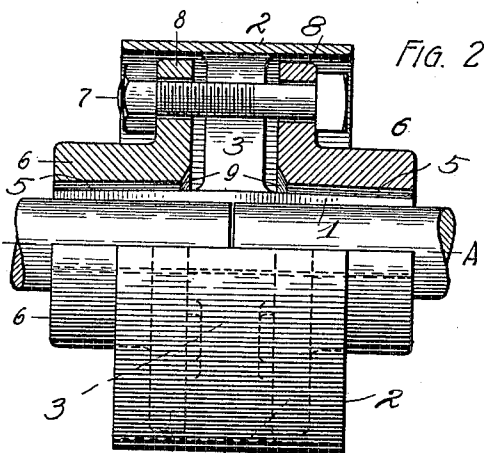


Fig. 3.

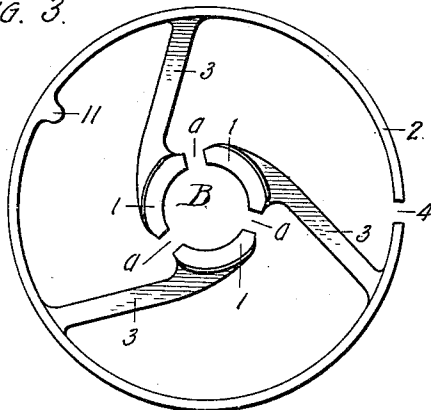


Fig. 4.

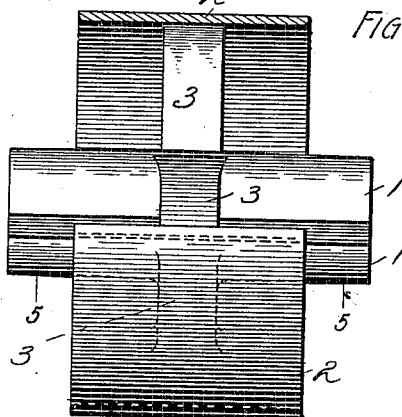


Fig. 5.

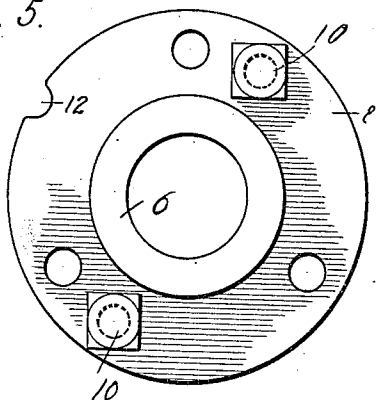
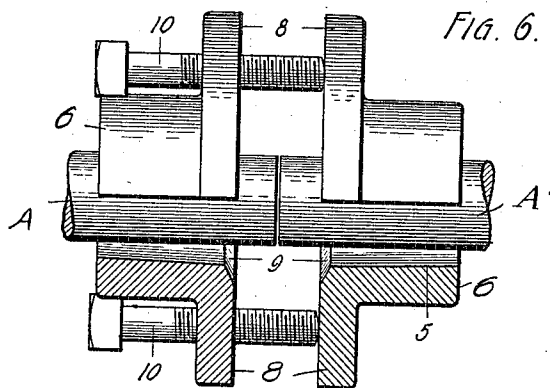


Fig. 6.



WITNESSES:

Thos. H. Norman
Chas. Endlich

INVENTOR

Eduwin H. Ahara

By Geo. E. Valdo,
ATTORNEY

UNITED STATES PATENT OFFICE.

EDWIN H. AHARA, OF MISHAWAKA, INDIANA.

SHAFT-COUPLING.

No. 838,231.

Specification of Letters Patent.

Patented Dec. 11, 1906.

Application filed March 31, 1906. Serial No. 309,057.

To all whom it may concern:

Be it known that I, EDWIN H. AHARA, a citizen of the United States, and a resident of Mishawaka, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Shaft-Couplings, of which the following is a specification.

This invention relates to shaft-couplings, and relates particularly to the type of shaft-coupling comprising a sleeve split lengthwise into separate sections and means for yieldingly supporting the sections of said sleeve to provide for compressing said sleeve into frictional engagement with the sections of the shaft to be coupled.

Among the objects of the invention are to provide a shaft-coupling of this type which will be efficient, strong, and durable and in which the least possible resistance consistent with requisite strength will be offered to the compression of the sections of the sleeve.

To this end my invention consists of the various features, combinations of features, and details of construction hereinafter described and claimed.

Referring now to the drawings, in which a coupling of my invention is fully illustrated, Figure 1 is a side view of my improved coupling, certain of the members thereof being partly broken away to expose underlying parts. Fig. 2 is a face view thereof, partly in elevation and partly in plan section. Fig. 3 is a side view of the sectional coupling-sleeve with the means for supporting the sections thereof. Fig. 4 is a side view thereof, partly in elevation and partly in plan section. Fig. 5 is a side view of the thimbles for compressing the sleeve; and Fig. 6 is a face view thereof, partly in elevation and partly in plan section.

Referring now to the drawings, A A' designate the shafts to be coupled, and B, as a whole, the coupling-sleeve, which is split lengthwise, as shown at *a*, to form any desired number of separate sections 1.

The sections of the sleeve B are maintained in desired relation by means of a suitable support consisting of a rim 2 and arms 3, which connect said rim with different sleeve-sections 1. The arms 3 preferably extend at right angles to radial lines which bisect the arcs formed by the different sections 1 of the coupling-sleeve B and are made as thin in the direction of flexure as is consistent with requisite strength. The rim 2 is also made

light and is preferably slit transversely, as shown at 4. With this construction it is obvious that both the rim 2 and the arms 3 will be easily flexible, thus offering the least possible resistance to the compression of the sleeve B to effect engagement thereof with the shafts A A' to be coupled and permitting substantially the entire force of the sleeve-compressing means to be exerted in contracting the sections of said sleeve upon said shafts.

While my invention contemplates any desired or approved means for compressing or contracting the sections of the sleeve B upon the shafts to be coupled, I prefer the means shown, which are as follows: The sleeve B is tapered at both ends, as shown at 5, and adjusted thereto are thimbles 6, the inner surfaces of which are tapered to fit the ends of said sleeve B. Said thimbles 6 are adapted to be drawn into strong engagement with the tapered ends 5 of said sleeve B by bolts 7, which extend through suitable openings in flanges 8, formed on said thimbles 6, which will operate in an obvious manner to compress the sections 1 of said sleeve B into strong frictional engagement with the shafts A A', thereby coupling them together in the desired manner. The thimbles 6 are preferably recessed on their inner faces, as shown at 9, to provide clearance-spaces to prevent contact of said thimbles with unfinished portions of the hub B adjacent to the arms 3.

Disengagement of the thimbles 6 with the sleeve B to release the shafts A A' may be effected by means of thrust-screws 10, threaded through the flanges 8 of one of said thimbles, and which are adapted to bear against the face of the flange of the other thimble. Thus when the bolts 7 are loosened it is obvious that screwing up said bolts 10 will operate to force the thimbles 6 apart, and thus to disengage them from the sleeve B, thus disconnecting the shafts A A' and allowing them to turn independently of each other.

To provide for readily assembling the different members of my improved coupling in desired relation, I provide a transverse rib 11 on the inner side of the rim 2, which is adapted to engage corresponding notches 12, formed in the edges of the flanges 8 of the thimbles 6 in proper position.

I claim—

In a shaft-coupling, the combination of a sleeve split lengthwise into separate sections, a support for said sleeve consisting of a rim

split transversely at a single place and flexible throughout and arms which connect the sections of said sleeve with said rim and means for compressing the sections of said
5 sleeve, thereby imparting substantially symmetrical flexure to said rim at all points.

In testimony that I claim the foregoing as

my invention I affix my signature, in presence of two subscribing witnesses, this 24th day of March, A. D. 1906.

EDWIN H. AHARA.

Witnesses:

THOS. H. NORMAN,
CHAS. ENDLICH.