

H. M. ROCKWELL.
SHAFT COUPLING.
APPLICATION FILED MAR. 12, 1910.

966,474.

Patented Aug. 9, 1910.

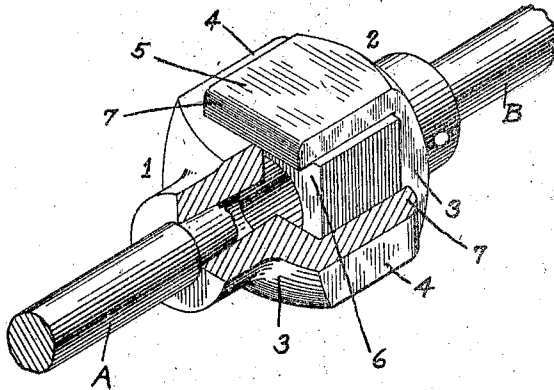


Fig. 1

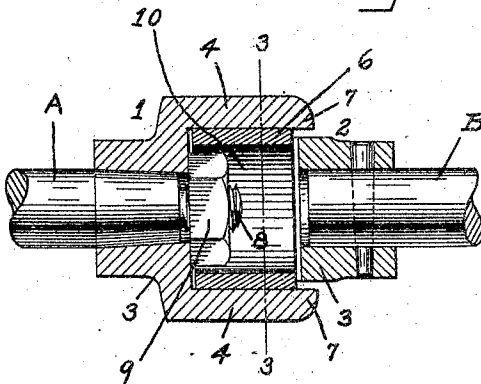


Fig. 2

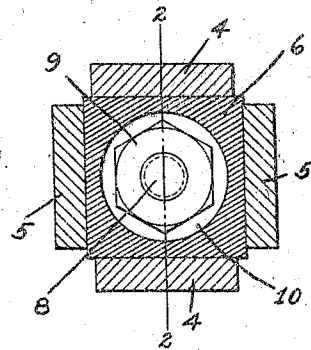


Fig. 3

WITNESSES:

F. E. Potter.
H. W. Judd.

INVENTOR:

Hugh M. Rockwell,
BY *Charles Thorne,*
his ATTORNEY.

UNITED STATES PATENT OFFICE.

HUGH M. ROCKWELL, OF BRISTOL, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE NEW DEPARTURE MANUFACTURING COMPANY, OF BRISTOL, CONNECTICUT, A CORPORATION OF CONNECTICUT.

SHAFT-COUPLING.

966,474.

Specification of Letters Patent.

Patented Aug. 9, 1910.

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To all whom it may concern:

Be it known that I, HUGH M. ROCKWELL, a citizen of the United States, residing at Bristol, county of Hartford, State of Connecticut, have invented a certain new and useful Shaft-Coupling, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to shaft couplings, my object being to produce a coupling of simple structure having positive driving connection between the coupling members and yet possessing great freedom of movement of said members with respect to each other.

To this end, and also to improve generally upon devices of the character indicated, my invention consists in the various matters hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view, partly in section; Fig. 2 is a longitudinal sectional elevation on about the line 2-2 of Fig. 3; and Fig. 3 is a transverse sectional elevation on about the line 3-3 of Fig. 2.

In the embodiment of my invention illustrated in the accompanying drawings A and B indicate the shaft sections to be connected, and 1 and 2 indicate the respective coupling members. Each of said coupling members is forked, having a head 3 from which the fingers of the forks extend, the fingers upon the coupling member 1 being marked 4, and those upon the coupling member 2 being marked 5. The fingers of each coupling member are diametrically opposite each other and, when the parts are assembled, are angularly disposed with respect to the fingers upon the other coupling member, so that the fingers of one said member are at about right angles to those of the other said member. The fingers are relatively broad and receive between them a central driving block 6 which is rectangular in cross-section.

In the structure shown, the fingers are of less width than are the faces of the block which they engage. Furthermore, the fingers are disconnected from the block, *i. e.*, they have no pivots or the like connecting them to the block, so that each finger is

freely movable with respect to the block. When the parts are assembled upon their shaft sections, the distance between the inner faces of the heads 3 is less than the length of the block 6, as is illustrated in Fig. 2. Therefore, this coupling presents great freedom of movement, it being possible for the shaft sections to move longitudinally toward and away from each other, to shift in lines transverse each other, and to rock with respect to each other. Nevertheless, the block forms a positive driving connection between the coupling members 1 and 2. Preferably each finger has a projecting portion 7 which extends beyond the block and overlaps the head of the other coupling section. This prevents accidental separation of the coupling members when the parts are assembled upon the shaft sections, because transverse movement of each coupling member is limited by the fact of its head 3 coming into contact with the overlapping portion of a finger of the other coupling member.

In the structure here shown the coupling member 1 is connected to its shaft section A by a threaded end 8 upon the shaft section receiving a nut 9, said threaded end and nut extending into the space between the fingers of the coupling members. In this event, the central driving block 6 can be provided with a central opening 10 to receive the said parts 8 and 9.

Manifestly, the present coupling is inexpensively made and easily assembled. Nevertheless, positive driving is insured between the coupling members and, at the same time, such coupling members have great freedom of movement with respect to each other. Furthermore, notwithstanding the simplicity of the structure, accidental separation of the coupling members by excessive sidewise movement is rendered impossible.

I claim—

1. A shaft coupling comprising a central block, a forked coupling member having its fingers upon opposite sides of said block and disconnected therefrom with respect to both longitudinal and lateral movement whereby said fingers are freely movable longitudinally and laterally with respect to said block, and a second forked coupling member having its fingers upon opposite sides of said

block and angularly disposed with respect to said first mentioned fingers, said second mentioned fingers also being disconnected from said block with respect to both longitudinal and lateral movement; substantially as described.

2. A shaft coupling comprising a central block, a forked coupling member having its fingers upon opposite sides of said block and movable laterally across the same, and a second forked coupling member having its fingers upon opposite sides of said block and angularly disposed with respect to said first mentioned fingers, said second mentioned fingers also being movable laterally across said block, the said fingers upon each of said coupling members extending beyond said block and overlapping the other said coupling member; substantially as described.

3. A shaft coupling comprising a central

block, and forked coupling members each having fingers upon opposite sides of said block, the fingers upon one said coupling member being angularly disposed with respect to the other said fingers, said fingers of each said coupling member being disconnected from said block with respect to both longitudinal and lateral movement whereby they are freely movable longitudinally and laterally with respect thereto, being of less width than said block, and extending beyond said block and overlapping the other said coupling member; substantially as described.

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

HUGH M. ROCKWELL.

Witnesses:

GALES P. MOORE,
ALICE E. BROWN.