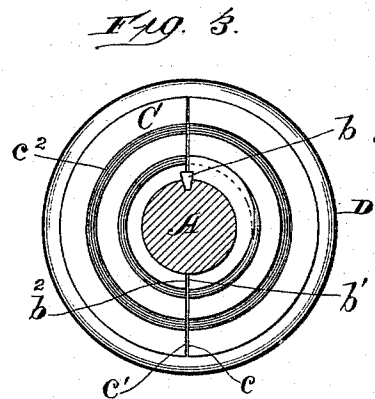
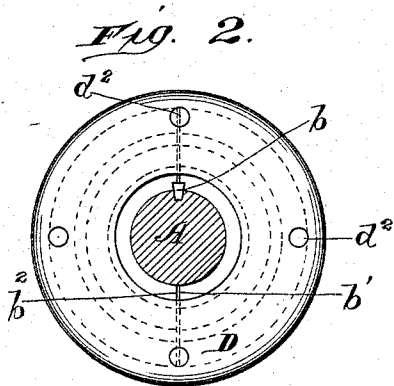
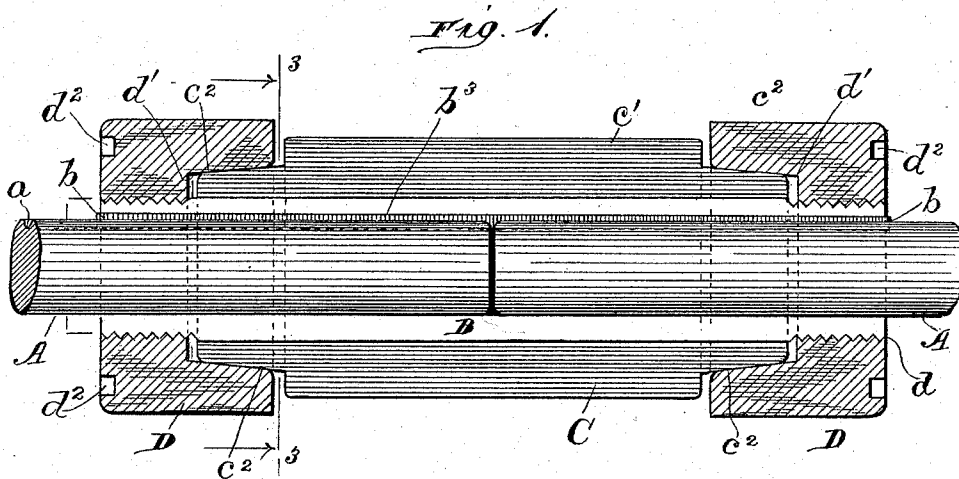


(No Model.)

M. ABRAHAM.
SHAFT COUPLING.

No. 526,551.

Patented Sept. 25, 1894.



Witnesses:
Chas. E. Gorton.
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Inventor:
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Atty.

UNITED STATES PATENT OFFICE.

MAX ABRAHAM, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
FREDERICK JOERS, OF SAME PLACE.

SHAFT-COUPLING.

SPECIFICATION forming part of Letters Patent No. 526,551, dated September 25, 1894.

Application filed February 7, 1894. Serial No. 499,339. (No model.)

To all whom it may concern:

Be it known that I, MAX ABRAHAM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Shaft-Couplings, of which the following is a specification.

This invention relates to improvements in a device or means for joining together or coupling shafts of machinery; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The objects of my invention are, first, to provide a shaft-coupling, which shall be simple and inexpensive in construction, strong and durable, yet effective in operation; second, such a coupling by means of which the shaft can be more readily joined together, and with a greater degree of safety, than is now accomplished by the ordinary shaft-couplings in use; and third, to provide a coupling, in which the use of screws, nuts, and bolts are dispensed with, thus rendering it more easy to attach and remove the coupling from the shaft.

A still further object of my invention, is to reinforce the coupling, so as to make it stronger or as strong as at any other point of the shaft. By the use of my construction, I also obtain double-friction on the shaft, which is also a beneficial result, as is obvious.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1, is a longitudinal sectional view of my device, showing it in position on and forming a coupling for the shaft. Fig. 2, is an end view thereof, and Fig. 3, is a view, taken on line 3, 3, of Fig. 1, with one of the collars removed.

Similar letters refer to like parts throughout the different views of the drawings.

A A, represent the portions of the shaft, which are designed to be coupled or joined together. The two pieces of the shaft are formed with a longitudinal groove a , for the reception of a key b , which engages with one

portion of the split-sleeve B, which split-sleeve is made of two pieces b' , b'' , of any desired length and of the requisite size for the shafting, which it is to be applied to. The inner surface of one of these pieces is provided with a longitudinal groove b^3 , for the reception of the upper portion of the key, which key when in position, will engage both the shafting and the sleeve, as is clearly seen in Fig. 1, of the drawings.

Instead of forming one of the pieces b' , or b'' , of the split sleeve B, with a groove for the key, I may form each piece at one of its edges with a recess, so that when the two edges are brought together, there will be a sufficient space to admit of the insertion of the key, as is illustrated in Fig. 2.

The outer surface of the split-sleeve B, is screw-threaded near each end, as shown in Figs. 1, and 3, to engage the collars D. The split-sleeve C, is made of two pieces c , and c' , and lies closely on the sleeve B, to reinforce the same. Near each end the pieces c , and c' , are formed with slightly tapering shoulders c^2 , over which the inner portions of the collars D, lap, as is clearly seen in the drawings. The collars D, are provided with screw-threaded openings d , to engage the threads on the sleeve B, and have the inner portions of said openings slightly flared, as at d' , in order that when they are screwed up on the sleeve B, they will ride on the beveled shoulders c^2 , of the outer sleeve C, and firmly secure the latter to the inner sleeve, as is apparent. The collars are also formed at their outer ends with small holes d^2 , for the reception of a wrench to be used in tightening the collars on the device, or for removing them therefrom.

From the foregoing description, it will be clearly seen and readily understood, that my device affords a strong, safe, and durable coupling for shafts, and one which can be quickly and readily attached thereto and easily removed therefrom, and which is of such a simple nature, that a mechanic of ordinary skill can construct and apply the same.

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

In a shaft-coupling, the combination of a

shaft having a groove for the key, said key,
with a split sleeve having the inner portions
of the edges of the two pieces thereof cut
away to form a space for the key, and screw-
5 threaded on its outer surface near each end,
an exterior split sleeve to reinforce the inner
sleeve and having tapering ends or shoul-
ders, and the collars each having a screw-

threaded and flaring opening and adapted to
engage the two split sleeves, substantially as 10
described.

MAX ABRAHAM.

Witnesses:

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PHILLIP SCHENK.