No. 701,020. Patented May 27, 1902.

S. E. DIESCHER.

COUPLING FOR PIPES, SHAFTS, &c.

(Application filed Jan. 28, 1902.)

(No Model.)

FIG. 1.

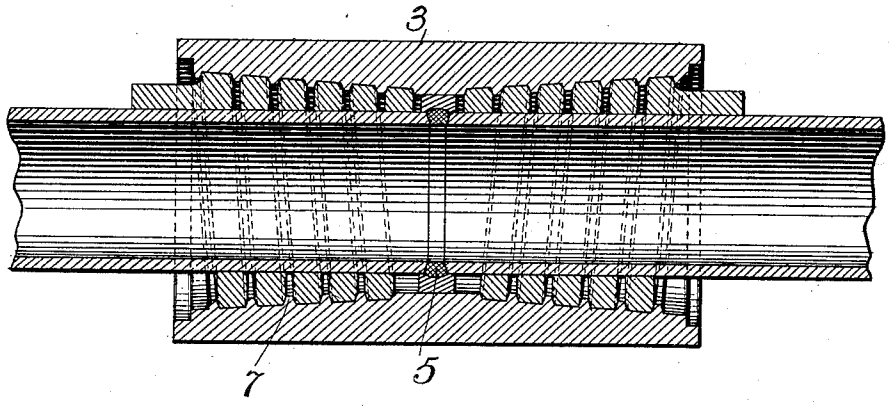
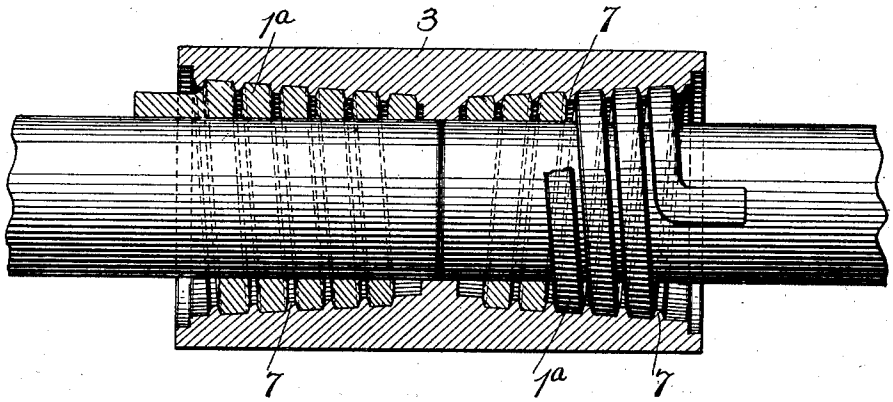


FIG. 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

SAMUEL E. DIESCHER, OF PITTSBURG, PENNSYLVANIA.

COUPLING FOR PIPES, SHAFTS, &c.

SPECIFICATION forming part of Letters Patent No. 701,020, dated May 27, 1902.

Application filed January 28, 1902. Serial No. 91,556. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL E. DIESCHER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Couplings for Pipes, Shafts, &c., of which improvements the following is a specification.

The invention described herein relates to certain improvements in the form or construction of pipe or shaft coupling forming the subject-matter of an application filed October 21, 1901, Serial No. 79,407.

The improvement is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional view showing the application of my improvement to pipe-sections; and Fig. 2 is a view, partly in section and partly in elevation, showing the coupling applied to shaft-sections.

The coupling set forth in the application referred to consists of a sleeve or shell having opposite internal tapers extending from its ends and two oppositely-wound coils 1. The coils are externally tapered, corresponding to the taper or inclination of the sleeve, and have an internal diameter slightly larger than the external diameter of the pipe or shaft sections to be connected. The coils are externally threaded and the sleeve is internally threaded. The pitch of the threads on one of the coils and at one end of the sleeve is opposite the pitch of the thread on the other coil and at the other end of the sleeve, so that when the sleeve is turned in the proper direction, the coils being held stationary, the latter will be drawn into the sleeve, and by reason of the taper of said parts the coils will be caused to grip the shaft or pipe sections.

In the practice of the invention described herein the coils 1^a are so formed that the spaces between adjacent turns form the female portions of the threads of the coil. The sleeve or shell 3 is provided with helically-arranged ribs 7, the rib at one end having a pitch opposite to that of the rib in the other end of the sleeve, so as to correspond with the coils, one of which is a right and the other a left hand helix. The adjacent turns of the ribs 7 are spaced a distance apart equal or approximately equal to the transverse dimensions of the bar forming the coils, so that said ribs will enter the spiral spaces in the coils.

By this improvement the coils themselves form one of the threads, and the other thread is formed during the shaping or forging of the sleeve or shell, so that the cutting of threads on coils and in the shell as separate operations is avoided.

As described in said application a suitable packing-ring 5 is interposed between the adjacent ends of pipe-sections 2, which are drawn inwardly against the packing-ring when the coupling is tightened up.

I claim herein as my invention—

1. A coupling for pipes, &c., having in combination a sleeve or shell internally tapered in opposite directions and having helically-arranged ribs and two coils externally tapered and having adjacent turns separated to form spaces for the reception of the ribs in the sleeve, substantially as set forth.

2. A coupling for pipes, &c., having in combination a sleeve internally tapered in opposite directions and having helically-arranged ribs, the rib at one end having a pitch opposite that of the rib at the other end, and right and left hand coils externally tapered and having adjacent turns separated to form spaces for the reception of the ribs in the sleeve, substantially as set forth.

In testimony whereof I have hereunto set my hand.

SAMUEL E. DIESCHER.

Witnesses:

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