A. P. BOHLINGER.

ANTIFRICTION DEVICE.

APPLICATION FILED JULY 11, 1917.

1,252,541. Patented Jan. 8, 1918.

Fig. 1.

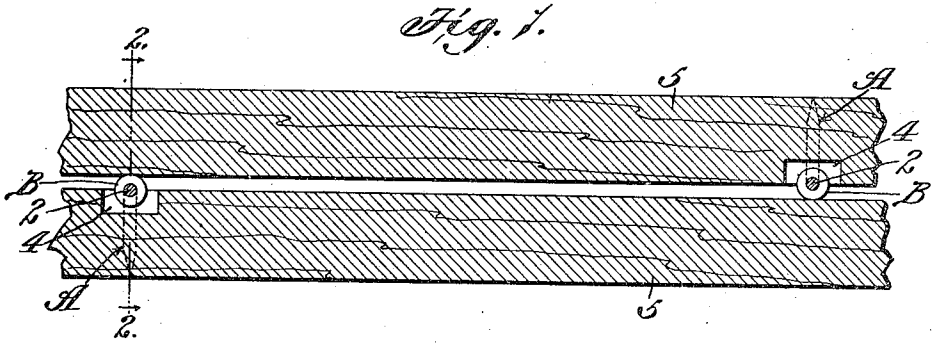


Fig. 2.

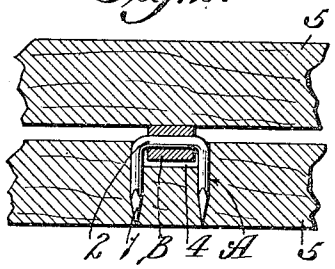


Fig. 3.

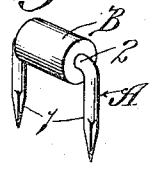
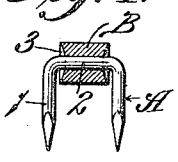


Fig. 4.



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UNITED STATES PATENT OFFICE.

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ANTIFRICTION DEVICE.

1,252,541. Specification of Letters Patent. Patented Jan. 8, 1918.

Application filed July 11, 1917. Serial No. 180,028.

To all whom it may concern:

Be it known that I, ALFRED P. BOHLINGER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Anti-friction Devices, 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.

This invention relates to anti-friction devices.

The main object of the invention is to provide an inexpensive anti-friction device that can be applied easily to the structure on which it is used.

Another object is to provide an anti-friction device that cannot shift or turn into an improper position after it has been installed.

And still another object is to provide an inexpensive anti-friction device of rugged construction that can be applied to a wooden structure simply by striking it a blow with a hammer.

To this end I have devised an anti-friction device which consists of a staple and a roller or tubular-shaped member rotatably mounted on the cross piece of the staple between the side legs of the staple. Said device can be used successfully with so many different kinds of structures that I will not attempt to enumerate the various uses of said device. It is particularly adapted for use, however, on articles of furniture, window sashes and other wooden structures comprising members that slide relatively to each other, on account of its low cost and the ease with which it can be applied.

Figure 1 of the drawings is a sectional view illustrating my improved anti-friction device used in connection with the slides of a wooden table.

Fig. 2 is a vertical cross-sectional view, taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of one of my improved anti-friction devices; and

Fig. 4 is a view illustrating a slight modification of my invention, the roller being shown in section.

Referring to the drawings which illustrate the preferred form of my invention, A designates a staple formed from wire or any other suitable material and provided with two side legs 1 whose upper ends are joined together by a cross piece 2. A roller or tubular-shaped member B is rotatably mounted on the cross piece 2 of the staple between the side legs 1. The legs of the staple are preferably pointed so that the staple can be driven easily into a wooden structure, and the roller B is preferably so proportioned that it is of substantially the same length as the cross piece 2 of the staple. If desired, the ends of the roller can be recessed slightly, as indicated by the reference character 3 in Fig. 4, so as to eliminate the possibility of the roller binding in case the staple is not provided with sharp angles at the points where the side legs of same merge into the cross piece 2 on which the roller is rotatably mounted.

An anti-friction device of the construction above described can be applied quickly and easily to the structure on which it is used simply by striking the roller B a blow with a hammer, so as to force the legs of the staple into said structure. Such a device can be manufactured and sold at a very low cost, as it consists merely of a staple having a roller or tubular-shaped member mounted on the cross piece of same. Moreover, after it has been installed there is no liability of the roller twisting into an improper position, because said roller is mounted on a part, namely, the cross piece 2 of the staple, both of whose ends are rigidly secured to the structure.

In installing said device it is preferable to form a notch, groove or recess 4 in the part to which it is applied, so as to provide ample clearance for the roller B, and thus permit said roller to turn freely on the cross piece of the staple. When the device is used in connection with table slides, drawers, window sashes and other structures that comprise two relatively long members 5, one or both of which slide relatively to the other, it is preferable to use a plurality of my improved anti-friction devices which are spaced apart and mounted on the two co-operating members of the structure, as shown in Fig. 1. It is immaterial, however, so far as my invention is concerned, how the device is mounted, or what kind of a structure it is used on, as my broad idea consists in an anti-friction device composed of a staple and a roller or tubular-shaped member rotatably mounted on the cross piece of the staple.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is:

1. An anti-friction device, consisting of a staple, and a roller or tubular-shaped member rotatably mounted on the cross piece of the staple between the side legs of the staple.

2. An anti-friction device, consisting of a roller or tubular member, and a shaft passing through said roller and provided at its opposite ends with integral prongs that are adapted to be driven into a supporting structure.

3. An anti-friction device, consisting of a staple, and a roller or tubular-shaped member rotatably mounted on the cross piece of said staple and having its ends recessed so as to prevent the roller from binding on the staple.

4. An anti-friction device, consisting of an inverted U-shaped member formed of wire or other suitable material and having its side legs pointed, and a roller or tubular-shaped member rotatably mounted on the cross piece of said member between the side legs of same.

ALFRED P. BOHLINGER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."