

E. N. HUMPHREY.
 TRACK PLATE FOR FURNITURE LEGS.
 APPLICATION FILED MAY 25, 1910.

968,357.

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Fig. 1.

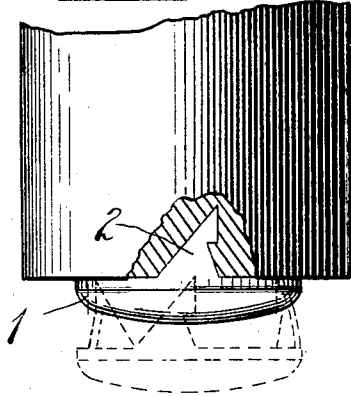


Fig. 2.

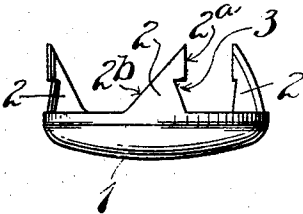


Fig. 3.

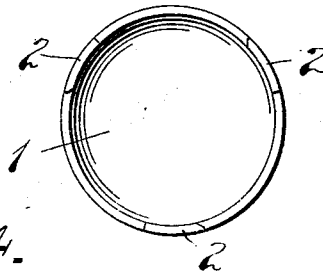


Fig. 4.

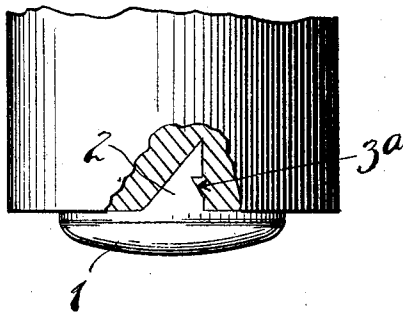


Fig. 5.



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UNITED STATES PATENT OFFICE.

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TRACK-PLATE FOR FURNITURE-LEGS.

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To all whom it may concern:

Be it known that I, ERNEST N. HUMPHREY, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Track-Plates for Furniture-Legs, of which the following is a full, clear, and exact description.

My invention relates to improved track-plate construction for the lower end of furniture legs, said plate being provided to permit furniture to slide easily over the floor, obviating the necessity for the usual caster.

The invention relates particularly to an improved construction whereby said plate may be securely anchored in place.

In the drawings Figure 1 is an enlarged side elevation, partly in section, of the lower end of a furniture leg with my track-plate in place. Fig. 2 is a side elevation of the track-plate alone. Fig. 3 is a top plan view. Fig. 4 is a view similar to Fig. 1, showing a modification. Fig. 5 illustrates a modified spur.

The track-plate comprises the convex body portion 1, provided with a plurality of upwardly projecting spurs 2-2. The invention is confined to the construction of the spurs, and a description of one will suffice for all.

Each spur 2 is provided with what I may term a locking edge and a cam edge. The locking edge is indicated at 2^a while the cam edge is indicated at 2^b. The locking edge is preferably provided with an under cut notch 3 to form a barb on said side. The cam edge is pitched at such an oblique angle relatively to the top of the spur body 1 that when the device is driven into the material of a furniture leg as shown in Fig. 1, it will cause the device to partake of a slight rotary or screwing-in movement in a direction to force the barb at the locking edge laterally into the material to securely anchor the device in place.

I am fully aware that plane supports, and barbed spurs, broadly speaking, are very old in this and analogous devices and are not patentable. My invention, however, is distinguished therefrom in that, whereas an ordinary barbed spur when driven into place simply cuts away the wood (or the material into which the spur is driven) in

advance of the barb, in such a manner that it can not get under or settle back effectively to the rear of the barb. By my improved spur construction a screwing-in action occurs in a direction to cause the barb to become interlocked with the material of the leg in such a manner as to hold the plate securely in place. For example, starting from approximately the position indicated in dotted lines, Fig. 1, when the device is driven in, said device will actually rotate on its own axis in such a manner as to shift the position of the spur from that indicated in dotted lines to that indicated in solid lines.

In Fig. 4 I have shown a slight modification in the notch in the locking edge of the spur, said notch being indicated at 3^a, the only difference being that the inclined side of the notch does not extend fully down to the edge of the plate 1, whereas in Fig. 1 it does.

By hardening the material of the device a very highly polished and durable finish is attained, whereby a minimum of friction occurs between the bearing face of the track-plate and the carpet or floor supporting the same. I make no claim to the hardening of the material for the purpose of securing a highly polished surface, since such a method has been employed and well understood for many years in the production of superior bearing surfaces, one example being found in the ordinary hardened steel ball for ball bearings.

From the foregoing it is apparent that my invention relates solely to the special construction of the retaining spur.

As shown, the cam edge of each spur is pitched in a same direction, for obviously if the cams on two spurs were pitched in opposite directions the tendency of one spur to rotate the device, as it is being driven in, would be opposed by the oblique edge of the other spur. The screwing-in action may, if desired, be facilitated by slightly thinning or sharpening the locking edge of the spur, as shown, whereby the cam edge being somewhat thicker offers greater resistance to the wood encountered as the device is being driven into place. While I have shown the locking edge of the spur as substantially square to the top of the track-plate body 1, it is obvious that this might be varied so

long as the cam edge is sufficiently more inclined relatively thereto to secure the cam action by which the twisting or screwing-in movement of the device is effected.

- 5 In the modification shown in Fig. 5 a plurality of laterally projecting barbs are shown on the locking edge of the spur 2, said plurality of barbs being indicated at 4.

What I claim is:

- 10 In a device of the kind described, a plate having a series of flat spurs located around and projecting from one side thereof, said spurs having edges adapted to cut into the wood to which said device is to be applied,

some of said edges being provided with 15 wood-engaging barbs, and means for imparting rotary movement to said device whereby the plate, together with the spurs, rotates bodily to the same degree when said device is being driven into place, said means 20 consisting of cam edges located on at least two of said spurs and opposite to the cutting edges.

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