M. H. THOMAS.

BUFFER FOR FURNITURE, &c.

APPLICATION FILED MAR. 7, 1912.

1,069,911.

Patented Aug. 12, 1913.

FIG. 1.

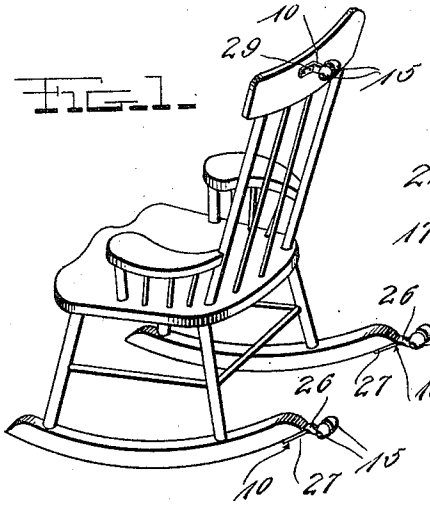


FIG. 4.

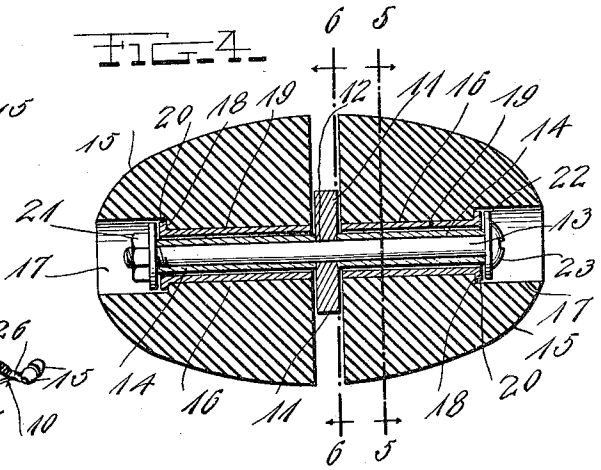


FIG. 5.

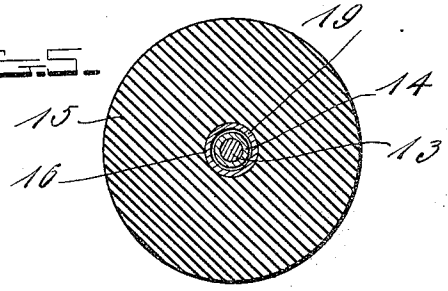


FIG. 2.

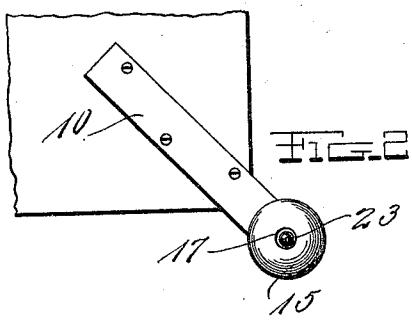


FIG. 7.

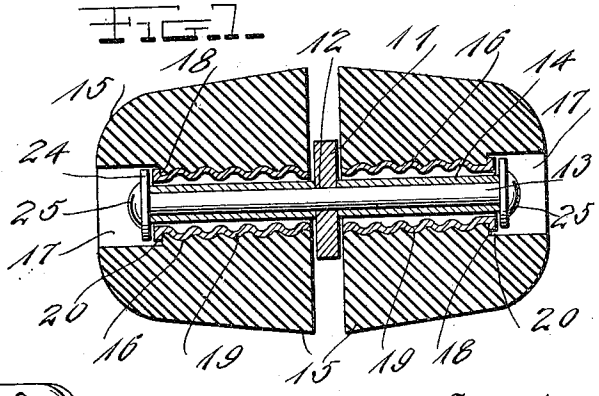


FIG. 6.

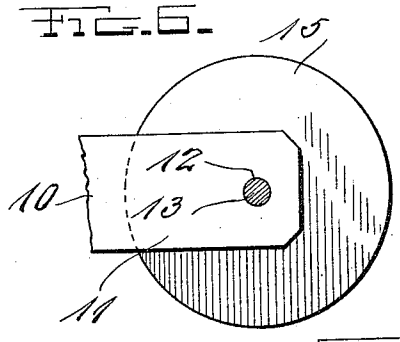
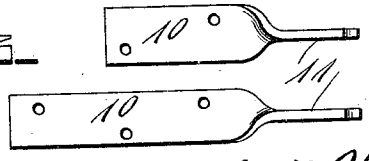


FIG. 3.



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UNITED STATES PATENT OFFICE.

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BUFFER FOR FURNITURE, &c.

1,069,911. Specification of Letters Patent. Patented Aug. 12, 1913.

Application filed March 7, 1912. Serial No. 682,198.

To all whom it may concern:

Be it known that I, MORONI H. THOMAS, a citizen of the United States, residing at Ogden, in the county of Weber and State of Utah, have invented certain new and useful Improvements in Buffers for Furniture, &c.; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to buffers or protectors for attachment to the rockers, backs, arms, or any other projecting parts of chairs or other articles of furniture likely to come into contact with other furniture or with the walls of the room when being moved about therein, to prevent injury by rubbing, denting, scratching or abrading the surface with which such projecting parts come into contact.

The object of the invention is to provide an improved article of this class which may be readily applied to any form of projecting parts of furniture in position to strike any article approached in advance of the part to which it may be attached and which will always present a yielding point of contact mounted to roll, rather than rub upon the surface with which it may come in contact.

With this object in view, the invention consists in the improved construction, arrangement and combination of the parts of a device of this character which will be hereinafter fully described and afterward specifically claimed.

In order that the construction and operation of the invention may be readily comprehended, I have illustrated an embodiment thereof in the accompanying drawings in which:—

Figure 1 represents a perspective view of a rocking chair with embodiments of my invention applied to the back and rockers thereof; Fig. 2 represents a view in bottom plan of the corner of a table, or a horizontal portion of any article of furniture, liable to contact with other articles while being moved about a room in a horizontal direction; Fig. 3 represents in detail various constructions of arms by which my invention may be supported and secured to various surfaces; Fig. 4 represents a longitudinal sectional view of my invention in its preferred form; Fig. 5 represents a transverse sectional view on the plane indicated by the broken line 5—5 of Fig. 4 looking in the direction of the arrows; Fig. 6 represents a similar view on the line 6—6 of Fig. 4; Fig. 7 is a view similar to Fig. 4 of a somewhat modified form.

Like reference characters mark the same parts wherever they occur in the various figures of the drawings.

Referring specifically to the drawings 10 indicates an arm or strip of metal, preferably ordinary sheet or strap, which at one end, as at 11 is flat and provided with an opening preferably circular in outline as at 12 to receive a pintle 13 which may be either a threaded bolt as illustrated in Fig. 4 or a plain pin riveted at its ends, as shown in Fig. 7. This pintle 13 is loosely fitted in the opening 12 of the arm 10 projecting at substantially a right angle in each opposite direction from the arm. Upon the pintle on each side of the arm 10 is loosely fitted to freely rotate a sleeve or collar 14 of plain cylindrical form.

My buffer comprises rollers 15, 15, of substantially the form of semi-ovals, as shown in Fig. 4, or conic frustums with rounded outer ends, as shown in Fig. 7, each of said rollers having a central bore as at 16, and an enlarged bore as at 17 in continuation of and alined therewith, a shoulder 18 being formed at the junction of said bores 16 and 17.

In each roller is snugly fitted a boxing 19, inserted through the enlarged bore 17 into the smaller bore 16, said boxing being of a length to reach from the inner end of the roller through the smaller bore 16 and being provided with a flange 20 at its outer end to abut against the shoulder 18 and prevent the boxing being projected beyond the inner end of the roller.

The boxings 19 are slightly larger in diameter than the sleeves 14 so that when slipped upon the sleeves, the boxings will freely rotate thereon. The sleeves 14 are slightly longer than the boxings 19 so that one of them will be tightly clamped longitudinally against one side of the arm 10 by a nut 21 on the bolt pintle of Fig. 4 and the other will be clamped longitudinally between the opposite side of the arm 10 and a washer 22 under the head 23 of said bolt

pintle, thus rigidly holding the arm 10, pintles 13 and sleeves 14 together after the rollers have been mounted thereon.

In assembling the parts constructed as shown in Fig. 4, the pintle 13, with the washer 22 thereon, is passed into the boxing 19 of one of the rollers from the outer end and projected beyond the inner end thereof, a collar 14 is slipped on the pintle and into the boxing of the roller therein; the pintle is inserted in and projected through the opening 12 of the arm 10; the second sleeve 14 is slipped upon the projecting end of the pintle, the second roller, containing its boxing 19 is slipped over the second sleeve 14; and the nut 21 is turned up tightly on the pintle against the end of the second sleeve 14, tightly clamping the parts as before described, with the rollers free to rotate on the sleeves 14.

In the construction shown in Fig. 7, the construction and mode of assembling of the parts are not materially different from that described. A washer 24 is substituted for the nut 21 and the parts are rigidly secured together by riveting the ends of the pintle as at 25.

In order to freely carry out the object of the invention, the rollers are preferably made of a yielding material such as india rubber, cork, or the like although harder smooth material may be used.

In order that the rollers mounted to freely rotate on the pintle may be applied to various parts of articles of furniture, the arms 12 are suitably shaped to attach to these parts in a manner to bring the rollers in the best relation thereto to protect the surfaces liable to be injured. Thus, in Fig. 1, for attachment to the rockers, the arms are twisted at 26 to bring the outer ends 11 into planes at substantially right angles to the planes of the ends 27 which are secured by screws or the equivalent thereof, to the bottoms of the rockers. The arm 10 for securing the rollers to the back of the chair is bent to form a right angle attaching flange 29 as also shown in Fig. 1. In attaching the rollers to the corner of a table, the arm 10 may be perfectly straight as shown in Fig. 2.

The head of the bolt pintle, the nut thereon, the washer, or the riveted ends of the pintle, are sunken below the end surfaces of the rollers to avoid contact by them with the surfaces liable to injury.

The sleeves may be varied in form, such, for instance as the plain cylindrical form of Fig. 4, or the corrugated form of Fig. 7, the operation and results being the same with both constructions.

The rollers constructed and assembled as described, will always present a rounded, rolling surface to any surface with which they may be accidentally brought into contact, thus substituting a rolling contact for an injurious rubbing, abrading or denting contact and avoiding injury to the walls or furniture surfaces, and while I have described in detail, some embodiments of the invention, it will be obvious to those skilled in the art to which my invention most nearly appertains that slight changes and variations may be made therein, without departing from the spirit and scope of the invention.

My improved buffer may be applied to any and all articles of house or office furniture such as office desks, tables, dressers, side boards, book cases, davenports, chiffoniers, pianos, etc., and may be set at the corners in such manner as to be the first thing in contact at either end or side.

The securing arms may be straight, or bent or twisted at angle according to the form of their points of connection with the articles of furniture. The buffer rollers may be of any form from that of a disk, to a full sphere, each half being either conical, segmental, semi-spherical, or other form as may be desired.

Having thus described my invention, what I claim as new is:—

An oval furniture buffer divided transversely to form two independently revoluble semi-oval surface engaging sections having longitudinally extending alining bores, said bores having enlarged outer ends in the smaller ends of the sections, an arm arranged between the larger ends of said sections and having an aperture therein registering with the bores of the sections, sleeves in the smaller portions of said bores of greater length and less diameter than the smaller bore portions, the inner ends of said sleeves bearing on opposite sides of said arm, a pintle loosely fitting in said sleeves, and means on said pintle ends housed in the larger portion of the bores for clamping the sleeves against said arm.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MORONI H. THOMAS.

Witnesses:
ANDREW W. HELLGETH,
J. H. JOICE.

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