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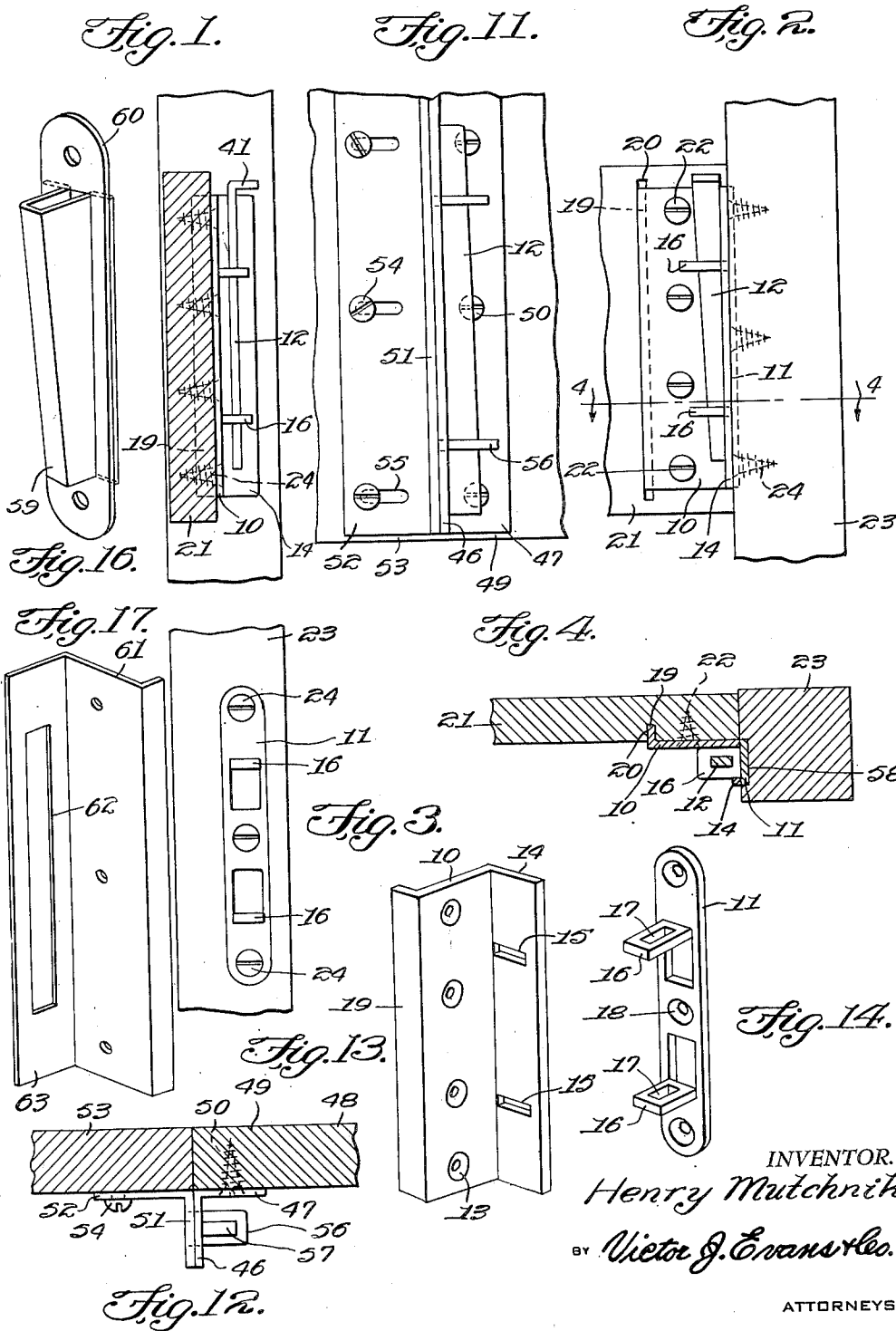
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SEPARABLE FASTENER FOR FURNITURE LEGS AND FRAMES

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2 SHEETS—SHEET 1



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SEPARABLE FASTENER FOR FURNITURE
LEGS AND FRAMES

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2 Claims. (Cl. 311-110)

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This invention relates to separable or detachable devices for securing table legs and tops to pedestals and bed rails and the like to posts, and in particular a holding plate with tongue receiving sockets therein, a base plate with tongues extended therefrom and a wedge for locking the tongues in the sockets whereby with the holding plate positioned on one element and the base plate on another the elements may be clamped together with a wedge action wherein play developing in a joint between the elements may be taken up by driving the wedge into the tongues.

The purpose of this invention is to provide a positive locking connection between elements such as table legs and bed rails and supporting members therefore in which a metal to metal contact is obtained so that the joint is not affected by shrinkage of the wood members.

In the usual method of attaching legs to pedestals of tables, and the like the parts are held by wood screws and when the furniture is moved it is necessary to remove and replace the screws. This continuous removing and replacing of wood screws in wood elements causes play so that furniture that is moved several times is not rigid. Furthermore wood shrinks with age and with screws holding one wood element against the other play soon develops in the joint. With these thoughts in mind this invention contemplates a positive metal to metal contact in joints of table legs and tops to pedestals and bed rails to posts wherein substantially all play due to shrinkage and wear is eliminated.

The object of this invention is, therefore, to provide means for rigidly connecting table legs and the like to pedestals in which the parts may be removed and replaced continually without play developing in the joints.

Another object of the invention is to provide a separable connection for table legs and tops and also for bed rails and the like in which the parts may be separated without removing screws.

Another object of the invention is to provide a separable connection for table legs, tops, bed rails and the like in which means is provided for taking up wear that may develop in the parts.

A further object of the invention is to provide a wedge controlled separable connection for removable elements of furniture and the like which is of a comparatively simple and economical construction.

With these and other objects and advantages in view the invention embodies a holding plate having tongue receiving sockets therein permanently mounted on the table element, a base plate with

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tongues extended therefrom and positioned to extend through the sockets of the holding plate mounted on another element and a wedge that is inserted through openings in the tongues of the base plate for positively clamping the base plate to the holding plate.

Other features and advantages will appear from the following description taken in connection with the drawings wherein:

Figure 1 is a cross section through a bed rail showing the separable connection securing the end of the rail to a bed post.

Figure 2 is a side elevational view of the device as shown in Figure 1 with parts of the bed rail and post broken away.

Figure 3 is an elevational view looking toward the post with the rail and holding plate carried thereby removed.

Figure 4 is a sectional plan taken on line 4-4 of Figure 2 showing a bed rail attached to a post.

Figure 5 is a view showing a table leg attached to the lower end of a pedestal of a table with parts of the pedestal broken away and shown in section and with the holding plate also shown in section.

Figure 6 is a view looking upwardly toward the under side of the lower end of the pedestal showing the devices mounted in the pedestal.

Figure 7 is a sectional plan taken on line 7-7 of Figure 5 showing the holding elements in position between the pedestal and table legs.

Figure 8 is a detail showing the front elevational view of the base plate shown in Figure 5.

Figure 9 is a view showing the holding plate of the design shown in Figure 5.

Figure 10 is a view showing the wedge.

Figure 11 is a view looking upwardly toward the under side of the modification illustrated in Figure 12 wherein the edges of two table tops are secured together by the separable device.

Figure 12 is a cross section through the separable device shown in Figure 11 also showing the edges of two tables locked together by the device.

Figure 13 is a detail illustrating a modification wherein an angle shaped holding plate is provided with a ledge on one leg for securing the holding plate in position on a bed rail as shown in Figure 4.

Figure 14 is a detail illustrating the base plate of the device shown in Figures 3 and 4.

Figure 15 is a detail illustrating the device in the position of holding the bridge of a table top to the upper end of a table pedestal.

Figure 16 is a detail showing a further modi-

fication wherein the tongues are combined providing a continuous sleeve.

Figure 17 shows a holding plate for the sleeve type of tongue shown in Figure 16.

Figure 18 is a sectional plan through the locking elements shown in Figures 16 and 17 with the parts assembled.

Referring now to the drawings wherein like reference characters denote corresponding parts the separable keeper or fastener of this invention includes a holding plate 10, a base plate 11, and a wedge 12.

In the device shown in Figures 1, 2, and 3 the holding plate 10 is provided with counter-sunk screw holes 13 and a flange 14 extends from one edge. The flange 14 is provided with sockets 15 for receiving tongues 16 with slots 17 therein, that extend outwardly from the base plate 11. The base plate 11 is also provided with counter-sunk screw holes as indicated by the numeral 18. In this design the holding plate 10 is also provided with a short flange 19 that is positioned in a slot 20 in a bed rail or the like, as indicated by the numeral 21 and with this flange positioned in the slot the holding plate is located on the end of the rail and securely held in position by the flange. The holding plate is also secured to the bed rail by screws 22 positioned in the openings 13.

With these parts in position and with the base plate 11 secured to the face of a post 23 by screws 24, the end of the bed rail is held against the face of the post with the tongues 16 extended through the sockets 15 and the wedge 12 is dropped into the openings 17. The wedge may be tapped lightly if desired and should wear develop in the parts the wedge may be driven further into the openings of the tongues.

In the design shown in Figures 5-10 inclusive an L-shaped holding plate 25 is secured in a recess 26 in a pedestal 27 and sockets 28 are positioned in the plate to receive tongues 29 on a base plate 30. The end 31 of the holding plate 25 is also provided with a socket 32 for receiving the wedge 12.

The plate 25 is also provided with screw holes, as indicated by the numeral 33 and this plate is secured in the recess 26 by screws 34. The base plate 30 is provided with screw holes 35 and this plate is secured in a recess 36 in the end of a leg 37 by screws 38.

With the parts arranged in this manner the legs 37 are positioned against the surface of the pedestal with the tongues 29 extended through the sockets 28 and the wedge 12 is inserted through the socket 32 and through the openings in the tongues, as shown in Figure 5. The wedge may be secured in the leg by a screw 39 positioned in an opening 40 in a head 41 and threaded into an opening 42 in the end 31 of the holding plate 25. The holding plate 25 and the base plate 30 are permanently attached to the pedestal and legs, respectively and with the wedge secured in position the legs are positively clamped to the post with a metal to metal contact.

In Figure 15 a device similar to the device illustrated in Figures 1-4 inclusive is illustrated on the upper end of a pedestal as indicated by the numeral 43 which may be the upper end of the pedestal 27, and in this design the base plate 11 is mounted on the under surface of a bridge 44 of a table top with the tongues 16 extended downwardly and the holding plate 10 is mounted on the surface of the upper end

of the pedestal. The flange 19 of the plate 10 extends into a slot 45 and the wedge 12 extends through the tongues 16.

In the design illustrated in Figures 11 and 12 a holding plate 46 with a flange 47 on one edge is secured to the under surface 48 of a table top 49 by screws 50. In this design the base plate 51 which is provided with an extended flange 52 is slidably mounted on the under surface of a table top 53 by screws 54 and with the screws positioned in elongated slots 55 of the flange 52 the base plate may be moved inwardly with the ends of the tongues 56 thereof under and within the limits of the top 53 so that the tongues do not project beyond the edge of the table top when the tables are separated. The tongues 56 are provided with wedge receiving openings 57 similar to the openings 17 of the tongue 16.

It will be understood, therefore, that the separable fastener or keeper of this invention, which is formed with a holding plate, a base plate, and a wedge may be provided in different designs whereby it is adapted for different types of furniture. The parts may be attached to the surfaces of the elements of furniture or may be mounted in recesses made therein, as shown, the base plate 11 being mounted in a recess 58 in the post 23 shown in Figure 4.

The holding and base plates may also be mounted upon different parts or elements of furniture or other devices and with the tongue of the base plate clamped in the sockets of the holding plate by the wedges the elements are rigidly secured together.

In the design shown in Figures 16, 17, and 18, the tongues 16 are combined providing a continuous tapering shield 59 on a base plate 60, and a holding plate 61 is provided with a slot 62 in a flange 63 to receive the shield, whereby with the parts mounted on parts of a table, bed or the like a wedge 12 is inserted in the sleeve to lock the parts assembled whereby a table top or leg, bed rail, or the like is rigidly clamped in position.

It will be understood that modifications in the design and arrangement of the parts within the scope of the appended claims, may be made in the fastener without departing from the spirit of the invention.

What is claimed is:

1. In a separable fastener for legs of table pedestals, the combination which comprises a holding plate positioned in a recess of the pedestal, said holding plate having spaced elongated sockets therein, a base plate with tongues having openings therethrough extended therefrom, said base plate mounted in a recess at the end of a table leg, and a wedge extended through the tongues of the base plate with the tongues extended through the sockets of the holding plate for clamping the legs to the pedestal.

2. In a separable fastener for legs of table pedestals, the combination which comprises an L-shaped holding plate positioned in a recess of the pedestal, said holding plate having spaced elongated sockets therein, a base plate with tongues having openings therethrough extended therefrom, said base plate mounted in a recess at the end of a table leg, a wedge extended through the tongues of the base plate with the tongues extended through the sockets of the holding plate for clamping the legs to the pedestal.

tal, said wedge having a flange extended from one end, and a screw extended through the flange of the wedge and threaded into the holding plate for securing the wedge in position in the fastener.

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