N. MARSHALL.
JIG FOR ASSEMBLING APPARATUS.
APPLICATION FILED SEPT. 28, 1905.
To all whom it may concern:

Be it known that I, Norman Marshall, a citizen of the United States, and a resident of Newton, county of Middlesex, Massachusetts, have invented certain new and useful Improvements in Jigs for Assembling Apparatus, of which the following is a specification.

The object of the invention is to produce a work-carrying jig by which the center terminal and base of a lamp-socket may be supported in proper relative position for the insertion of the screw which secures the parts together.

Such a jig may be used with especial advantage in supporting the parts and presenting them to the action of an automatic screw-driving mechanism or to a mechanism for automatically feeding and driving the screws.

In producing a jig which admits of the ready and convenient placing and removing of the parts and which will efficiently hold them in proper relative position I have provided the jig with a central part adapted to fit within the screw-shell of the socket and have also provided a device for engaging a recess in the base and holding the base and attached parts in fixed angular position on the jig.

The jig is also provided with devices for determining and maintaining the angular position of the center terminal on the jig and for retaining the terminal in the recess formed in the base for its reception.

The various features of the invention will be set forth in the claims and will be understood from the following detailed description of the jig, (shown in the drawings,) which embodies the features in the simple and efficient form in which I prefer to use them.

In the drawings, Figure 1 is an elevation of the jig, the porcelain base of a socket being shown in dotted lines. Fig. 2 is a section on line 2 2, Fig. 1, showing the base and terminal in position. Fig. 3 is a plan view of the jig, and Fig. 4 is a perspective view of a porcelain base.

As shown in the drawings, the jig is provided with a central supporting-post J, which is cylindrical and of a size to fit within the screw-shell 4 of the socket. The jig is also provided with a vertical rod or post J, so arranged that it will lie in the groove 1 of the base when the base is in position on the jig and will determine and maintain the angular position of the base. The angular position of the center terminal 7 is determined and maintained by means of an annular rib J, formed on the top of post J and provided with a slot J, within which the arm of the terminal fits. The terminal is held in position within the recess 7 of the base by means of an arm J, projecting from the rod J and provided with a laterally-projecting end for engaging the terminal. The end of the arm J is slotted at J, so that the end of the screw 8 may pass through the base of the terminal as the screw is driven into the terminal 7.

In order to enable the ready application and removal of the parts, the rod J is mounted to turn in the base of the jig and is forced in a direction to press the end of the arm J against the terminal 7 by a spring J. The rod is turned against the tension of the spring by pressing on a projecting finger-piece J when the parts are to be applied to the jig or removed therefrom.

A spring-arm J may be mounted upon the rod J in position to engage the upper side of the porcelain base 1 and assist in holding the parts firmly on the jig.

In applying the parts to the jig the operator inserts the mica disk 9 within the shell 4, places the terminal 7 within the recess 7, and then slips the shell 4 over the post J, holding the base 1 in proper relation for the rod J to enter the groove 1. The rod is turned back during the application of the parts to the jig, so that the arms J and J do not interfere with the positioning of the parts. When the parts have been placed in position, the rod J is released and the spring J acts to press the end of arm J firmly against the terminal, holding it securely in place, the spring-arm J overriding the upper end of the base 1 and holding it in place. The screw 8 may then be introduced into the recess 8 by hand or automatically and may be driven home by a screw-driver, as indicated at I in Fig. 2.

The jig above described is well adapted for use in a machine in which a series of jigs are brought successively into position beneath an automatically-operated screw-driving mechanism. When so used, the jigs may be secured to a table B and may be brought successively into position beneath the screw-driving mechanism I by intermittent movement of the table.

Without attempting to set forth in detail the various forms in which the invention
may be embodied, what I claim, and desire to secure by Letters Patent, is—

1. A work-supporting jig provided with a projection arranged to engage a recess in a socket-base, and devices for retaining the center terminal in position on the base.

2. A work-supporting jig provided with a support to fit the shell of a socket, a rod arranged to engage a groove of the socket-base and devices for retaining the center terminal in position on the base.

3. A work-supporting jig provided with a support to fit the shell of the socket, a rod arranged to engage a groove of the socket-base, and a spring-operated arm for engaging the center terminal and retaining it in the recess in the base.

4. A work-supporting jig provided with a support to fit the shell of the socket, a projection arranged to engage a recess in the socket-base and retain it in angular position, and an arm arranged to engage the center terminal and retain it in the recess in the base.

5. A work-supporting jig provided with a central support for entering the screw-shell, a pivoted rod arranged to enter a groove of the socket-base, a laterally-projecting arm carried by the rod and arranged to engage the center terminal and hold it on the socket-base.

6. A work-supporting jig provided with a central support for entering the socket-shell, an annular rib on the top of the support provided with a slot for the arm of the center terminal a pivoted rod arranged to engage a groove of the socket-base, and a terminal-engaging arm carried by the rod.

7. A work-supporting jig provided with a central support to fit the socket-shell, a pivoted spring-operated rod arranged to enter a groove in the socket-base, and a laterally-projecting terminal-engaging arm on the rod.

8. A work-supporting jig provided with a central support to fit the socket-shell, a pivoted rod arranged to enter a groove in the socket-base, and a laterally-projecting spring-arm on the rod arranged to overlie the socket-base.

In witness whereof I have hereunto set my hand this 5th day of September, 1905.

NORMAN MARSHALL.

Witnesses:

IRA L. FISH,
KATHARINE A. DUGAN.