O. B. STITZER.

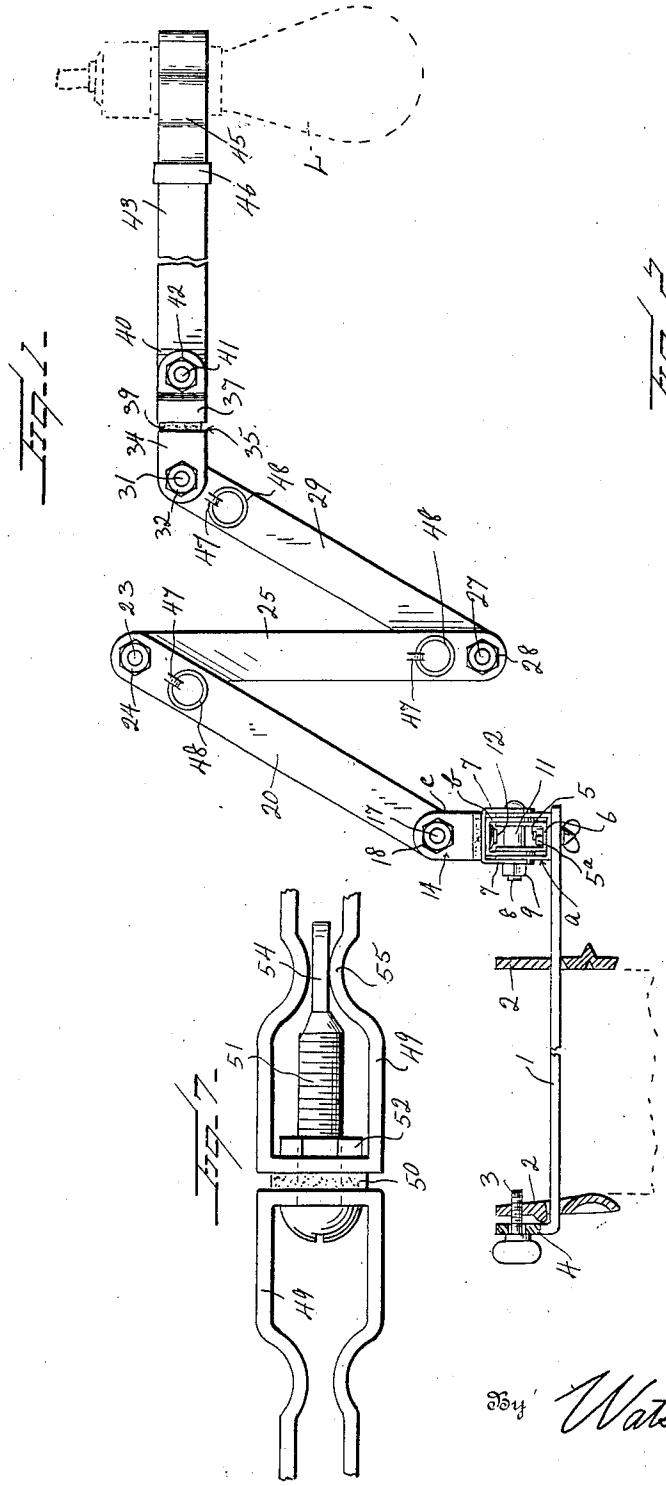
SUPPORT.

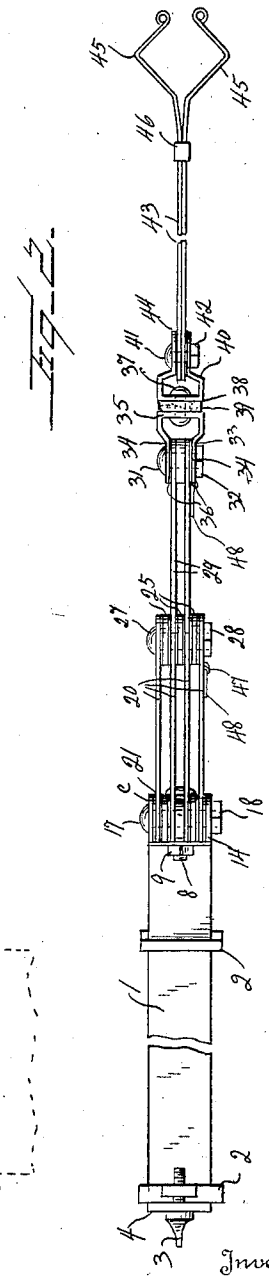
APPLICATION FILED MAR. 10, 1920.

1,380,121.

Patented May 31, 1921.

2 SHEETS—SHEET 1.





Inventor

O. B. Stitzer

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SUPPORT.

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2 SHEETS—SHEET 2.

Fig. 4.

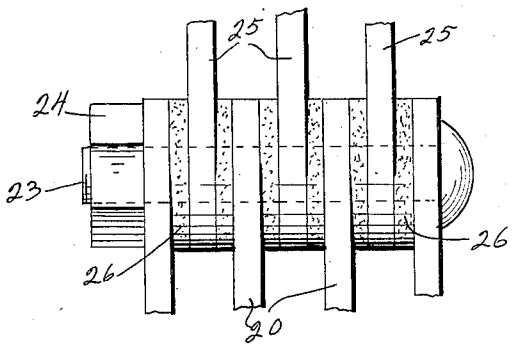


Fig. 5.

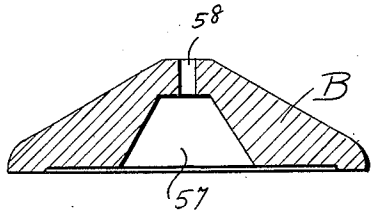


Fig. 3.

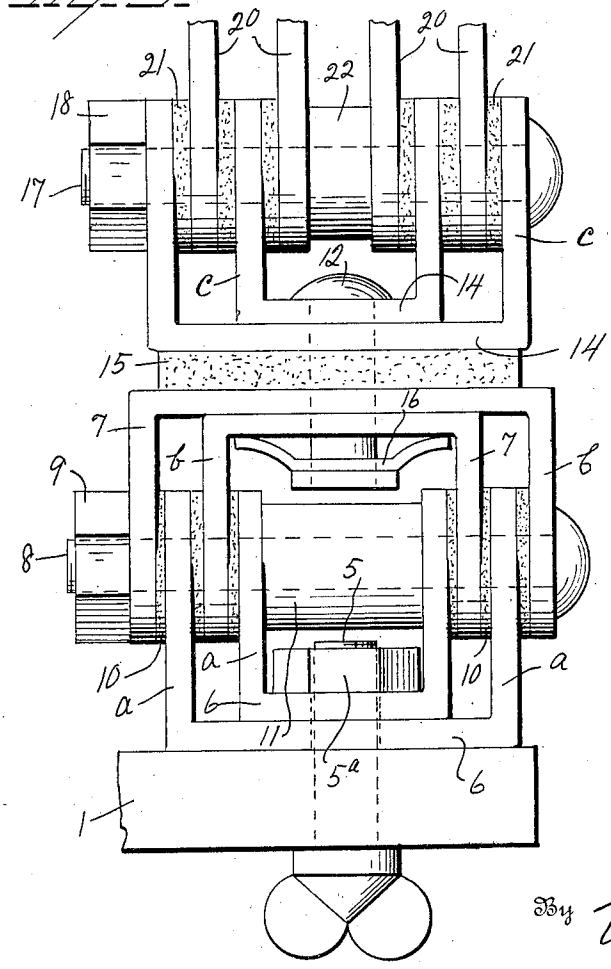
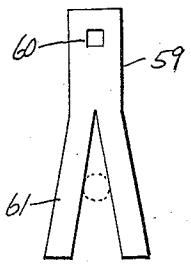


Fig. 6.



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UNITED STATES PATENT OFFICE.

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SUPPORT.

1,380,121. Specification of Letters Patent. **Patented May 31, 1921.**

Application filed March 10, 1920. Serial No. 364,696.

To all whom it may concern:

Be it known that I, OSCAR BURKE STITZER, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Supports, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in supports and has relation more particularly to a device of this general character especially designed and adapted for use in connection with lamps, and it is an object of the invention to provide a novel and improved support which permits the light carried thereby to be readily adjusted into a position desired.

Another object of the invention is to provide a novel and improved device of this general character comprising a plurality of pivotally connected sections and wherein friction means are provided to maintain the various sections in the different relative adjustments as may be required by the occasions of practice and wherein the support irrespective of its adjustment is substantially rigid in order to assure the maintenance of the light carried by the support in the position or location desired.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved support whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view partly in side elevation and partly in section of a support constructed in accordance with an embodiment of my invention;

Fig. 2 is a view in top plan of the device as illustrated in Fig. 1;

Fig. 3 is an enlarged fragmentary view in elevation illustrating the structure embodied in the inner or base portion of the device;

Fig. 4 is an enlarged fragmentary view in elevation illustrating the connection between two series of elongated arms;

Fig. 5 is a sectional view illustrating a form of base which may be employed in connection with my support;

Fig. 6 is a view in top plan of a further form of base which may be employed in connection with my device as herein embodied; and

Fig. 7 is an elevational view illustrating a swivel connection constructed in accordance with a further embodiment of my invention.

As particularly illustrated in Figs. 1, 2, and 3 of the accompanying drawings, my improved support or holder comprises an elongated body 1 having engaged therewith the clamping or binding plates 2 adapted to engage the opposite faces of the work, such as the edge of a table, a door casing, a pipe and the like. One of the binding or clamping plates 2 is adjustable longitudinally of the body 1 while the second plate 2 is under control of the headed member 3 in threaded engagement with said plate 2 and coacting with an angular extension or end portion 4 of the plate whereby said plate 2 is caused to rock in order to assure the requisite binding or clamping action.

Disposed through the end portion of the body 1 remote from the extension or angular portion 4 is a headed shank 5. The shank 5 preferably extends upwardly through the body 1 and is also disposed through the center parts of the base portions of the nested U-shaped members 6. The shank 5 is also in threaded engagement with a clamping nut 5^a coacting with the central part of the inner member 6 whereby upon requisite rotation of the shank 5, said members may be held to the body 1 against rotation about the shank 5 or in a fixed position upon the body 1. When it is desired to adjust the members 6, it is only necessary to loosen the clamp or binding action of the nut 5^a.

The adjacent side arms *a* of the members 6 are spaced one from the other so that same may intermesh with the spaced side arms *b* of the nested members 7, each being in the form of an inverted U. The free end portions of the side arms *a* and *b* are in overlying relation and have disposed therethrough the headed shank 8 whereby the members

6 and 7 are pivotally connected so that the same may be relatively adjusted about the shank 8 as may be required. In threaded engagement with the extremity of the shank 8 is the clamping bolt 9 which, upon requisite rotation, operates to clamp or lock the sections 6 and 7 against relative movement whereby the same may be effectively maintained in their desired adjustments. In order to facilitate the binding or clamping action of the nut 9, I find it of importance to interpose between adjacent arms *a* and *b* the washers 10, preferably of fiber, and which washers surround the shank 8. The washers 10 serve as friction elements whereby the maintenance of the members 6 and 7 against relative swinging movement is materially facilitated so that after a desired adjustment of these members has been effected, a substantially rigid joint is assured. To further facilitate the functioning of the clamping or binding nut 9, I interpose between the arms *a* of the inner members 6 a sleeve or bushing 11, preferably metallic, and which sleeve or bushing surrounds the shank 8 and snugly fits between said arms *a*.

Freely disposed through the central portion of the nested members 7 is a rivet or pivot member 12 which is also loosely disposed through the central portion of the two U-shaped members 14 nested one within the other with the adjacent side arms *c* spaced one from the other. Interposed between the base portions of the outer members 7 and 14 is a washer 15, preferably of fiber, and surrounding the rivet or pivot member 12 and which washer 15 also serves as a friction element to facilitate the maintenance of the relative adjustments of the members 7 and 14 about the rivet or pivot member 12 as may be required by the necessities of practice.

Interposed between the inner end portion of the rivet or pivot member 12 and the intermediate or base portion of the inner member 7 is an expanding element 16, preferably a spring washer and which serves to constantly urge the rivet or pivot member 12 in one direction in order to normally clamp or bind the members 7 and 14 against relative movement and which is further facilitated by the washer 15. However, the member or washer 15 permits sufficient yielding movement of the rivet or pivot member 12 when it is desired to obtain such relative adjustments.

The outer or free end portions of the arms *c* of the members 14 have disposed therethrough the headed shank 17 and one end portion of which has in threaded engagement therewith the clamping nut 18. 20 denotes a plurality of elongated flat arms of duplicate construction and dimension and through the inner end portions of which the shank 17 is also directed whereby said arms 20 are pivotally engaged with said shank 17. An arm 20 is arranged at opposite sides of each of the arms *c* of the inner member 14 and interposed between the adjacent arms *c* and 20 are the washers 21, preferably of fiber, and which serve as friction elements. The washers 21 also surround the shank 17. These washers 21 also serve to materially facilitate the maintenance of the arms 20 in the desired adjusted positions as the clamping action of the nut 18 is increased due to the frictional resistance offered by said washers 21 and whereby the joints or connections of said arms 20 with the shank 17 may be maintained substantially rigid irrespective of the arrangement of said arms 20. Interposed between the two inner arms 20 is a sleeve or bushing 22 surrounding the shank 17 and snugly bridging the space between said arms 20. This sleeve or bushing 22 is preferably made of metal and also operates to increase the functioning of the clamping or binding nut 18. The opposite or outer end portions of the arms 20 have disposed therethrough a headed shank 23, having in threaded engagement with an end portion thereof the clamping or binding nut 24.

Extending between each pair of adjacent arms is an elongated flat arm 25 and through which end portion the shank 23 is also directed whereby the arm 25 is supported for swinging or pivotal movement. In the present embodiment of my invention, the arms 25 are three in number. Arranged at opposite sides of each of the arms 25 is a washer 26, preferably of fiber, and which constitutes a frictional element. The washers 26 surround the shank 23 and each of said washers coacts with the end portion of an arm 25 and the end portion of an adjacent arm 20 whereby the arms 25 are effectively and substantially rigidly maintained in their various adjustments through the instrumentality of the clamping or binding nut 24 and the frictional resistance offered by the washers 26. The arms 25 are duplicate in configuration and dimension and disposed through the outer end portions is a shank 27 having in threaded engagement with an end portion thereof a binding nut 28. Disposed between the outer end portions of each pair of adjacent arms 25 is an end portion of an arm 29 through which the shank 27 is also directed whereby the arms 29 are pivotally engaged with the shank 27. Arranged at the opposite side of each of said end portion of each of the arms 29 is a friction washer which also coacts with the adjacent arm 25. This washer is also of fiber and serves as a frictional element for the same purpose as has hereinbefore been set forth with respect to the fiber washers 21 and 36.

The outer or opposite end portions of the

arms 29 have disposed therethrough a headed shank 31 having in threaded engagement with an end portion thereof a clamping nut 32. Surrounding the shank 31 and snugly fitting between the arms 29 is a spacing sleeve or bushing 33 formed preferably of metal. Overlying said outer end portion of the arms 29 are the free end portions of the side arms 34 of a substantially U-shaped member 35 and interposed between said arms 34 and the adjacent faces of the arms 29 are the fiber washers 36. The washers 36 surround the shank 31 and also serve as frictional elements to facilitate the clamping or binding action of the nut 32 so that the member 35 may be substantially rigidly held in desired position.

In swivel connection, through the instrumentality of the rivet 37 or the like, with the central part of the member 35 is a central part of a substantially U-shaped member 38 whereby said members 35 and 37 may have relative rotary movement. Interposed between the opposed portions of the members 35 and 37 is the fiber washer 39 which constitutes a frictional element and whereby said members 35 and 37 are normally held against relative rotation.

Disposed through the outer end portions of the side arms 40 of the member 37 is a headed shank 41 having in threaded engagement with one end portion the clamping or binding nut 42. Extending between the side arms 40 of the member 37 are the inner end portions of a bore or elongated flat arms 43 through which the shank 41 is also disposed. Surrounding the shank 41 and positioned between the opposed faces of the arms 43 and the side arms 40 are the fiber washers 44, constituting friction elements for normally holding the arms 43 against rocking or swinging movement with respect to the shank 41.

The outer or free end portions of the arms 43 terminate in the inwardly facing spring jaws 45 which are adapted to hold therebetween a suitable lighting unit L indicated by dotted lines in Fig. 1 as an incandescent lamp, and wherein the jaws 45 coact with the socket portion of said lamp. In order to assure proper engagement of the jaws 45 with the lighting unit L, the arms 43 are surrounded by the sliding sleeve or collar 46 operating in a conventional manner. The jaws 45 may be supported to any desired extent by moving the sleeve or collar 46 inwardly of the arms 43 and to firmly engage the lighting unit by forcing the sleeve or collar 46 in a direction toward the jaws 45.

The outer of each set of arms 20, 25 and 29 adjacent its forward end portion has struck therefrom a loop or eye 47 through which is engaged a ring 48 or the like. The rings 48 are adapted to have threaded therethrough the conductor cable or cord leading to the lighting unit L from a suitable source of electrical energy so that such cable or cord will offer no obstruction or hindrance with the desired adjustment of the device.

As illustrated in Fig. 7, I show a further embodiment of my invention as relates to the swivel connection between either the members 7 and 14 or the members 35 and 37. In this embodiment of my invention, the coacting U-shaped members 49 have inserted through the central parts thereof and through the interposed fiber washer 50 a headed shank 51. The shank 51 is threaded and has engaged therewith an adjusting or clamping nut 52. The free end portion 54 of said shank 51 or that portion thereof remote from the head is flattened and is adapted to be engaged between the inwardly disposed depressions 55 carried by the side arms 56 of one of the members 49. By this means, the shank 51 is held against turning or rotation so that the nut 52 may be adjusted as may best meet with the requirements of practice.

My improved support can also be employed in connection with the base B as is particularly illustrated in Fig. 5 of the accompanying drawing and which base is provided with a substantially flat bottom or under surface provided at substantially its axial center with a socket 57. The upper portion of the base B is provided with the opening 58 in communication with said socket 57. When my support is employed in connection with the base B, the members 6 rest upon the upper surface or face of the base B with the shank 5 disposed through the opening 58 and the lower portion thereof housed or confined within the socket 57. With the use of the base B, the support may be readily placed upon the table, bench or other flat surface.

When it is desired to use my improved support in connection with the erection or repairing of machinery or the like, I find it of advantage to provide the elongated member 59 as illustrated in Fig. 6 One end portion of the member 59 is provided with an opening 60 through which the shank 5 is adapted to be directed to properly anchor the member 6 while the opposite end portion of the member 59 is provided with the diverging arms 61. These arms 61 are adapted to straddle the shank of a bolt or screw between the work and the head of said screw or bolt or nut or the like coacting therewith.

From the foregoing description, it is thought to be obvious that a support constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is

susceptible of some change and modification without departing from the principles and spirit thereof, and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. A support of the class described comprising a member supported for rocking movement, a U-shaped member mounted upon said first named member, a pivot member disposed through both of said first named members for pivotally connecting the same, one end portion of said pivot member being provided with a head, means coacting with the pivot member for constantly urging the same in one direction to cause the head of said pivot member to normally clamp the first named sections and permitting movement of said members one away from the other when it is desired to rotate one of said members about the pivot member, an articulated member having one end portion operatively engaged with the second named member, and engaging means carried by said articulated member.

2. A support of the class described comprising a member supported for rocking movement, a U-shaped member mounted upon said first named member, a pivot member disposed through both of said first named members for pivotally connecting the same, one end portion of said pivot member being provided with a head, means coacting with the pivot member for constantly urging the same in one direction to cause the head of said pivot member to normally clamp the first named sections and permitting movement of said members one away from the other when it is desired to rotate one of said members about the pivot member, an articulated member having one end portion operatively engaged with the second named member, and an engaging member in swivel connection with the opposite end portion of the articulated member.

3. A support of the character described comprising an articulated member, anchoring means operatively engaged with one end portion of the member, an engaging member in swivel connection with the opposite end portion of said articulated member, said swivel connection comprising two substantially U-shaped members, one operatively engaged with the articulated member and the second with the engaging member. a headed shank disposed through and pivotally connecting said U-shaped members, and a nut threaded on said shank for maintaining the shank and U-shaped members in assembled relation, said shank and one of the U-shaped members being provided with coacting means to hold the shank against rotation.

In testimony whereof I hereunto affix my signature.

OSCAR BURKE STITZER.