A. W. NELSON.

ADJUSTABLE ANGLE PLATE.

APPLICATION FILED DEC. 23, 1918.

1,323,901. Patented Dec. 2, 1919.

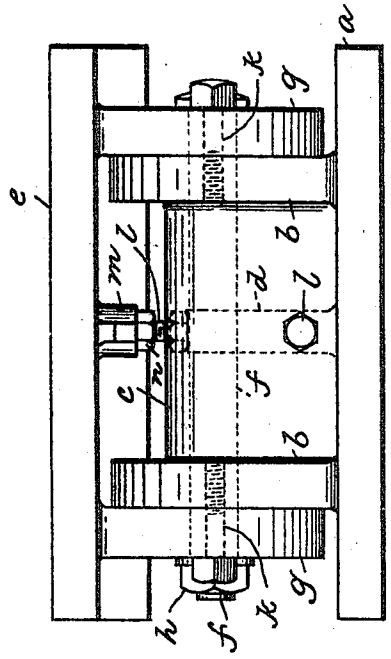


Fig. 2.

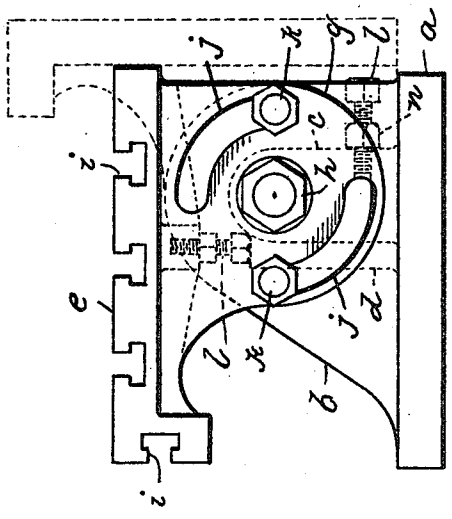


Fig. 1.

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UNITED STATES PATENT OFFICE.

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ADJUSTABLE ANGLE-PLATE.

1,323,901. Specification of Letters Patent. Patented Dec. 2, 1919.

Application filed December 23, 1918. Serial No. 268,093.

To all whom it may concern:

Be it known that I, ALEXANDER W. NELSON, a citizen of the United States, residing in the city of Newark, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Adjustable Angle-Plates, of which the following is a full, exact description, such as will enable others skilled in the art to which it pertains to make, construct, and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, forming a part of this specification.

This invention relates to adjustable angle plates, and the object of my invention is to provide an angle plate having the usual two flat and true surfaces, one at right angles to the other, pivotally mounted upon a base or support and provided with means for turning and locking the angle plate in any angular position relative to said support or base, thereby increasing the simplicity of the construction and operation of the device, by decreasing the number of parts of which the usual device is composed; by lessening or avoiding the necessity for adjustment of the various parts, and by increasing the convenience in manipulation of the device.

To this end, I have made changes in this device from similar devices; all with the object of increased efficiency.

With these ends in view, my invention consists in novelties of construction and arrangements of parts as hereinafter set forth and pointed out in the claims.

While the preferred form of my invention is illustrated in the accompanying drawings, yet it is to be understood that minor changes may be made without departing from the scope thereof.

In the drawings, in which like letters of reference indicate corresponding parts throughout:—

Figure 1 represents an end elevation of my improved device; and

Fig. 2 represents a side elevation thereof.

In the drawings *a* represents a suitable support, preferably iron, which may be of any desired or convenient shape, provided with two integral standards *b*—*b*, which are connected with an integral rib *c*. One side of the rib *c* is provided with an integral projection *d* extending upwardly from the base *a* to and near the top of the rib *c*. Pivotally mounted upon said support *a* is the angle plate *e*, by means of a stud *f* which passes through the apertured end flanges *g*, which are formed integrally with the angle plate *e*, and through the central bore which passes through the integral standards *b*—*b* and integral rib *c*. One end of the stud *f* has screw-threaded engagement with the nut *h*, by means of which the angle plate is pivotally secured upon said base. The angle plate *e*, as shown in the drawings, is provided with two flat and true surfaces, one at right angles to the other. The work surfaces of the plate contain slots or guide-ways *i* to receive the bolts used to fasten the work. In order to provide a movement approximating 90 degrees of the angle plate and to secure said plate in its adjusted position, the end flanges *g*—*g* are provided with slots *j*—*j* for the reception of bolts *k*—*k* which are screw-threaded into the integral standards *b*—*b* of the base or support *a*. Means are also provided for limiting the horizontal and vertical movement of the angle plate, said means comprising headed bolts *l*—*l* one of which is tapped into one side of the integral rib *c*, the head of said bolt limiting the movement of the angle plate in a vertical direction and the other bolt being tapped into a suitable boss *m* formed integral with the underside of the angle plate *e*, the head of which engages with the integral projection *d*, formed on the rib *c*, to limit the movement of the angle plate in a horizontal direction. The bolts are provided with suitable lock nuts *n* by means of which the bolts are locked in their adjusted positions.

Experience has demonstrated that the organization above described is a highly efficient one, and while I have shown the preferred embodiment of my present invention, I do not wish to be limited to the exact details of construction shown and described, as obvious modifications thereof, not involving the exercise of invention, may be made by any skilled mechanic, and such departures from what is herein set forth, I consider within the scope and terms of my claims.

Having thus described my invention, what I desire to secure by Letters Patent is:—

1. A device of the character described, comprising a support, an angle plate hav-

ing two true surfaces, one at right angles to the other, pivotally mounted upon said support, means for turning and locking said angle plate in an angular position relative to said support, and adjustable means for limiting the movement of the angle plate in a longitudinal and vertical direction.

2. A device of the character described, comprising a support, provided with standards, an angle plate having two true surfaces, one at right angles to the other, and provided with slotted end flanges pivotally mounted upon said support, and means for turning and locking said angle plate in an angular position relative to said support, said means comprising bolts passing through the said slotted end flanges of the said angle plate and secured in the standards of the base and adjustable means secured to the base and the angle plate for limiting the movement of the angle plate in a longitudinal and vertical direction.

This specification signed and witnessed this 20th day of December, 1918.

ALEXANDER W. NELSON.

Witnesses:

FRED'K C. FISCHER,

OTTO NELSON.