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C. E. SPRINGER.

ADJUSTABLE SUPPORT FOR JOISTS.

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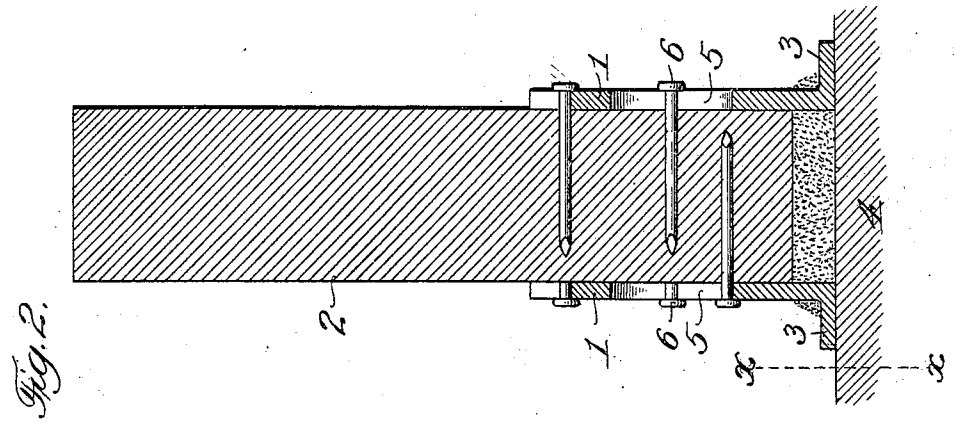



Fig. 2.

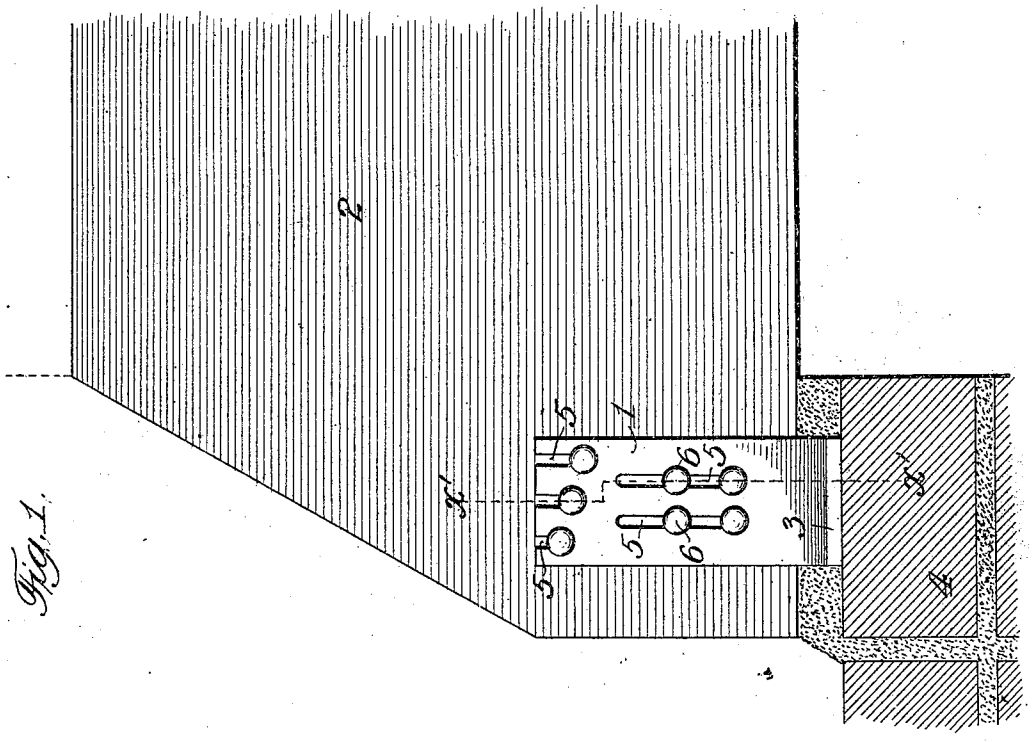



Fig. 1.

Attest:
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# UNITED STATES PATENT OFFICE.

CHARLES E. SPRINGER, OF CHICAGO, ILLINOIS.

## ADJUSTABLE SUPPORT FOR JOISTS.

No. 801,482. Specification of Letters Patent. Patented Oct. 10, 1905.

Application filed December 10, 1904. Serial No. 236,376.

*To all whom it may concern:*

Be it known that I, CHARLES E. SPRINGER, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adjustable Supports for Joists, of which the following is a specification.

This invention relates to a leveling-support for the ends of the joists of buildings, and has for its object to provide a simple and efficient appliance for attachment to the side or sides of the joists near their respective ends and by means of which the ends of the joists can be individually and accurately adjusted so that their upper surfaces will be on a common level and be so maintained in a certain and substantial manner, while the whole series of joists are laid and brought to a common level and while the wall beneath the joists is being pointed up with mortar, cement, or the like as the final and permanent support for the series of joists, all as will hereinafter more fully appear.

In the accompanying drawings, Figure 1 is detail longitudinal sectional elevation at line $x$ $x$, Fig. 2, illustrative of the present invention. Fig. 2 is a detail transverse section at line $x'$ $x'$, Fig. 2.

Similar numerals of reference indicate like parts in both views.

In the setting of wood joists of buildings so that their upper surfaces will be on a common level difficulties and delays are met with owing to irregularities in the surface of the walls upon which the joists are laid and which irregularities necessitate the introduction of pieces of slate or other material beneath the individual ends of more or less of the joists in order to attain a common level of their upper surfaces.

The present improvement is intended to dispense with the ordinary leveling provisions above mentioned and reduce the delays and difficulties incident to the use of the same, while at the same time affording a substantial and conveniently-adjustable support for the joists ends, and the present invention accordingly involves a construction of parts as follows:

1 represents counterpart pieces of plate metal constituting the present joist-support and adjustably secured in the manner hereinafter described to opposite sides of a joist 2, near the end of the same. Said supporting pieces or plates are formed with lateral foot-flanges 3, adapted to rest upon the surface of the building-wall 4, and in the preferred form of the present invention, as illustrated in Fig. 2 of the drawings, such foot-flanges project away from each other, so as to provide a wide bearing for the joists they are intended to support. While a pair of such supporting-pieces is preferable on each joist end as affording a very even and substantial support, the scope of the present invention embraces the use of a single supporting-piece at the end of the joist where the judgment of the builder may suggest such use.

5 represents one or more elongated slots formed in each of the supporting-pieces 1 and adapted for the passage of the nails or screws by which said supporting-pieces are attached to the sides of the joists in a manner to permit of a ready and accurate vertical adjustment of said supporting-pieces with relation to the joists.

In the practical use of the present improvement the supporting-pieces 1 are initially secured to joist ends by nails 6, driven into the joists midway the height of the elongated slots aforesaid. The pieces can then be adjusted vertically to the desired position by blows of a hammer and further independent downward movement of a particular joist end prevented by nails driven into the same at the lower ends of the elongated slots. Should subsequent raising of the joist end be required, the same can be readily effected by driving additional nails through the elongated slots immediately beneath the driven nails last referred to.

While a plurality of elongated slots in each supporting-piece, as shown in Fig. 1, is the preferred means for affording a strong and substantial attachment, the scope of this part of the present invention is not necessarily limited to such plurality of slots, and a single elongated slot may be used in each piece when so desired, or other equivalent attaching means may be substituted for said slot or slots.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An adjustable support for joist ends, the same comprising a supporting-piece attached in a vertically-adjustable manner to the side of the joist with its lower end adapted to project below the joist to form an adjustable bearing for the same, substantially as set forth.

2. The herein-described adjustable support for joist ends, the same comprising a supporting-piece formed with one or more vertically-elongated slots and attached in a vertically-adjustable manner to the side of the joist by nails passing through said slots, the lower end of said piece projecting below the joist to form an adjustable bearing for the same, substantially as set forth.

3. An adjustable support for joist ends, the same comprising a supporting-piece provided with a foot-flange at its lower end and attached in a vertically-adjustable manner to the side of the joist with its lower end adapted to project below the joist to form an adjustable bearing for the same, substantially as set forth.

4. The herein-described adjustable support for joist ends, the same comprising a supporting-piece provided with a foot-flange at its lower end and with one or more vertically-elongated slots, said piece being attached in a vertically-adjustable manner to the side of the joist by nails passing through said slots, the lower end of said piece projecting below the joist to form an adjustable bearing for the same, substantially as set forth.

5. As an improved article of manufacture, an adjustable support for joist ends, the same comprising a plate of metal formed with a foot-flange and provided with a series of vertically-elongated slots adapted for the passage of a series of nails by which the support is attached to the joist end in a manner permitting vertical adjustment between the parts, substantially as set forth.

Signed at Chicago, Illinois, this 18th day of November, 1904.

CHARLES E. SPRINGER.

Witnesses:
ROBERT BURNS,
M. H. HOLMES.