No. 817,174. PATENTED APR. 10, 1906.

J. M. JONES.

LADDER AND BRACKET CONSTRUCTION.

APPLICATION FILED NOV. 21, 1903.

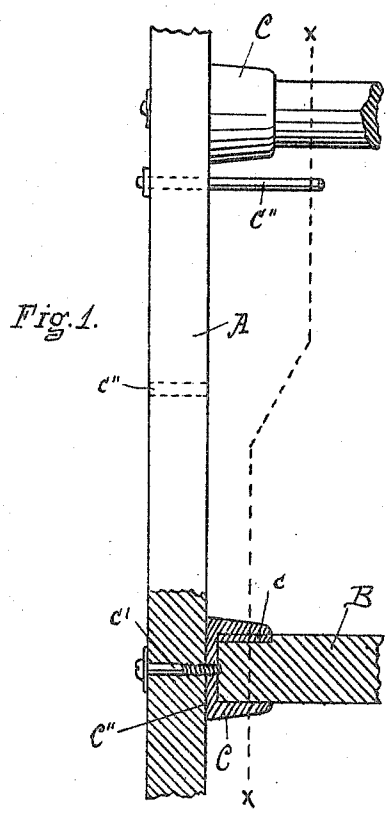


Fig. 1.

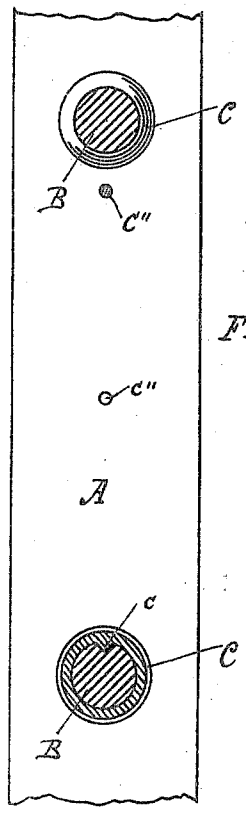


Fig. 2.

WITNESSES
Rich. A. George
E. F. De Giorgi

INVENTOR
JOHN M. JONES.
BY Riley & Love
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN M. JONES, OF UTICA, NEW YORK.

LADDER AND BRACKET CONSTRUCTION.

No. 817,174. Specification of Letters Patent. Patented April 10, 1906.

Application filed November 21, 1903. Serial No. 182,065.

To all whom it may concern:

Be it known that I, JOHN M. JONES, a citizen of the United States, residing at Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Ladder and Bracket Construction, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved ladder construction; and I declare that the following is a full, clear, concise, and exact description thereof sufficient to enable one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, in which like letters refer to like parts throughout.

A particular feature of my invention is found in the simplicity of its construction and its safety and adaptability in use, presenting in its construction and combination of parts certain new and improved features.

Referring to the drawings, Figure 1 is a side view of a ladder with certain parts cut away, showing my improvement; and Fig. 2 is a section view of a rung-socket of the ladder on the line $x\,x$ of Fig. 1.

Referring to the figures more in detail, A shows the side rails of a ladder, in which are supported the rungs B. These are supported in rung-sockets C, which I illustrate as being circular in section, although they may have other suitable form. The socket has a longitudinal ridge c on its inner periphery, the rung being grooved to receive the same and the purpose of which is to prevent the rung from being turned on its axis. The socket C has plane face C′, which rests against the ladder-rail and is held thereto by screw or screw-bolt c', which is passed through the hole c'' in the ladder-rail. This provides for ready replacement of any of the rungs. These holes may be duplicated in regular order and may be placed at irregular intervals, corresponding in each rail, so that if it be desired to place a rung in an unusual position it can readily be done by withdrawing the screws c' and placing the rung-sockets and the rung at any desired height. For the purpose of further stability, if needed, I provide for rods C″ to pass from one rail to the other of the ladder, being secured by a head and nut.

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

In a ladder, side rails with a plurality of transverse openings, rungs and rung-sockets, the said sockets embodying recesses for engaging the ends of the rungs and means for securing the said sockets to the rails, the said means engaging the sockets through certain of the transverse openings to arrange the rungs with suitable spaces therebetween, means connecting the rails rigidly, in combination, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. JONES.

Witnesses:
W. D. STONE,
E. T. DE GIORGI