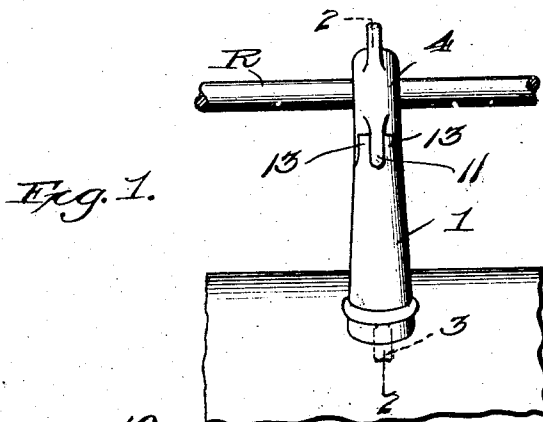
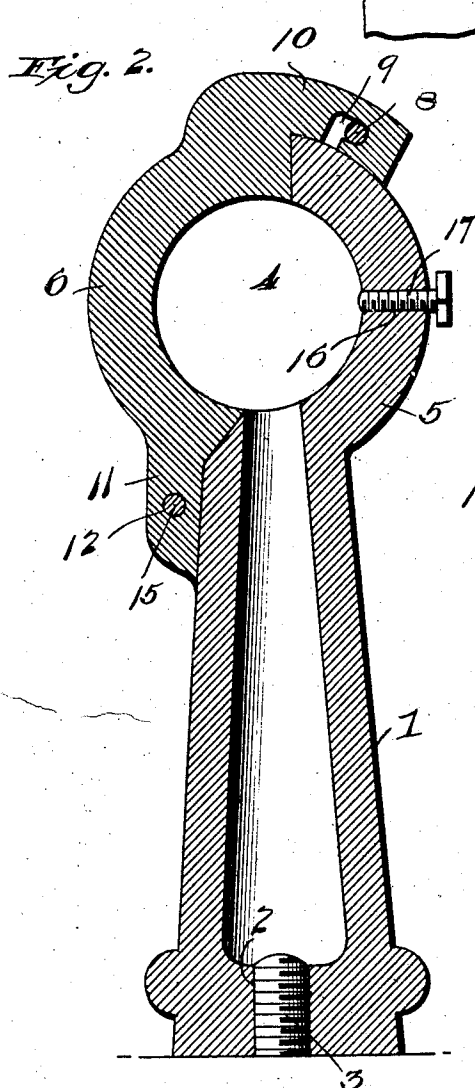
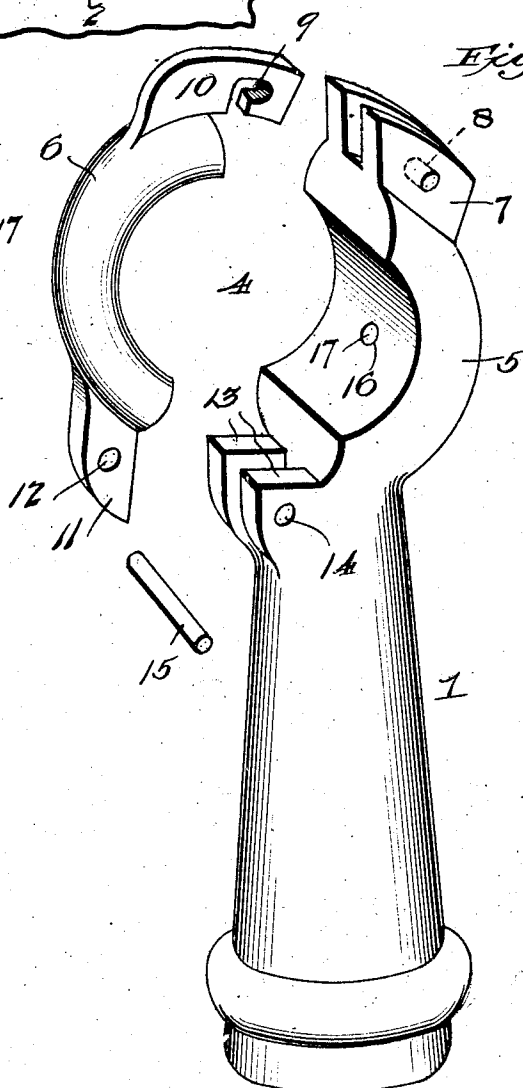


J. C. LYLE.
HAND RAIL COLUMN.
APPLICATION FILED MAY 7, 1906.



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Witnesses

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UNITED STATES PATENT OFFICE.

JOHN CHARLES LYLE, OF LIMA, OHIO.

HAND-RAIL COLUMN.

No. 833,746.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN CHARLES LYLE, a citizen of the United States, residing at Lima, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Hand-Rail Columns, of which the following is a specification.

This invention relates to an improved hand-rail column designed for the support of hand-rails that are employed in connection with locomotive engines, boilers, and other objects.

To this end the invention has in view an improved type of hand-rail which greatly facilitates the removal of the rail for repair purposes, while at the same time comprising means for rigidly and securely holding the same in place to provide a safe and substantial hand-rail, especially when used in connection with locomotive-boilers.

The ordinary type of hand-rail column usually employed on locomotive-boilers consists of an integral or solid construction in which the collars are of a one-piece formation. With this construction it usually requires several hours to remove the hand-rail from the columns by reason of the fact that the same has to be driven in and out, whereas by the use of the present invention the hand-rail may be removed and replaced at a moment's notice.

With these and other objects in view, which will appear to those familiar with the art as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

The essential features of the invention involved in the formation of the divided rail-holding collar are susceptible to structural change without departing from the scope of the invention; but a preferred embodiment thereof is shown in the accompanying drawings, in which—

Figure 1 is an elevation showing a hand-rail supported by a column constructed in accordance with the present invention. Fig. 2 is an enlarged longitudinal sectional view of the column on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of the improved rail-column, showing the detachable collar-section separated from the fixed collar-section carried by the standard member of the column.

Like references designate corresponding parts in the several figures of the drawings.

In carrying out the present invention no special change is required in the manner of mounting the column upon the locomotive-boiler or in such other position as it may ordinarily be employed. According to the invention the said improved hand-rail column essentially consists of a standard member designated by the numeral 1 and preferably provided at its lower end with a threaded socket 2 for engagement with the threaded securing-stud 3, fitted to the boiler or other object in the usual manner.

A distinctive feature of the invention resides in providing the standard member 1 at its upper end with a divided collar designated in its entirety by the reference-number 4 and consisting of the fixed and detachable collar-sections 5 and 6, respectively. The fixed collar-section 5 is rigid with the upper end portion of the standard 1 and is preferably formed integral therewith. Also the said fixed and rigid collar-section is provided at or contiguous to one extremity thereof with a pair of offstanding keeper-ears 7, forming therebetween a socket across which extends a fixed catch-pin 8, adapted to be detachably engaged by the bayonet or equivalent shaped catch-hook 9, formed in or on the catch-arm 10, projecting from one end of the detachable collar-section 6. The said detachable collar-section 6 is a complement of the semicylindrical portion of the fixed collar-section 5, so that when the ends of said sections are in abutting and registering relation the same provide a complete cylindrical collar which tightly grips and holds the hand-rail R, which is designed to be supported by the collar.

The catch-arm 10 is integral or otherwise rigidly formed at one end of the detachable collar-section 6, while the directly-opposite end of said arm is provided with an offstanding fastening-lug 11, provided with a key-opening 12 therein and adapted to fit between the keeper-ears 13, projected laterally from the upper end of the standard 1 contiguous to the lower end of the fixed collar-section 5. The said keeper-ears are provided therein with key-openings 14, adapted to register with the key-opening 12 to receive a cotter or equivalent key 15 for fastening the collar-sections. One of the collar-sections is further provided with a threaded screw-open-

ing 16, in which is fitted a binding set-screw 17, which is utilized for holding the hand-rail perfectly tight within the collar 4.

To remove the hand-rail, it is simply necessary to remove the fastening-key 15 and swing the detachable collar-section 6 outward and upward to permit of the disengagement of the catch-hook 9 from the catch-pin 8. A reversal of the operation provides for clamping the collar-section 6 in place.

I claim—

1. A hand-rail column of the class described, consisting of a standard member provided with a divided collar consisting of fixed and detachable sections.

2. A hand-rail column of the class described, consisting of a standard member provided at its upper end with a divided collar comprising a fixed section rigid with the standard and a detachable section having a locked engagement with the fixed section.

3. A hand-rail column of the class described, comprising a standard member provided at its upper end with a divided collar consisting of a fixed collar-section rigid with the standard and having at one end a keeper

element, and a detachable collar-section having at one end a catch-lug for detachable engagement with the said pin, and at its other end a fastening-lug arranged to be secured to said keeper element.

4. A hand-rail column of the class described, comprising a standard member provided at its upper end with a divided collar consisting of a fixed section and a detachable section, the fixed collar-section being rigid with the standard and provided at one end with a fixed catch-pin and at its other end with a keeper element, and the detachable collar-section being provided at one end with an arm having a bayonet-hook for engagement with said pin, and at its other end having a fastening-lug arranged to be secured to said keeper element, and a binding set-screw mounted in one of the collar-sections.

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

JOHN CHARLES LYLE.

Witnesses:

W. T. COPELAND,
W. L. ROGERS.