(No Model.)

C. D. STEVENS.

METALLIC ROD PACKING.

No. 271,748. Patented Feb. 6, 1883.

Fig. 1.

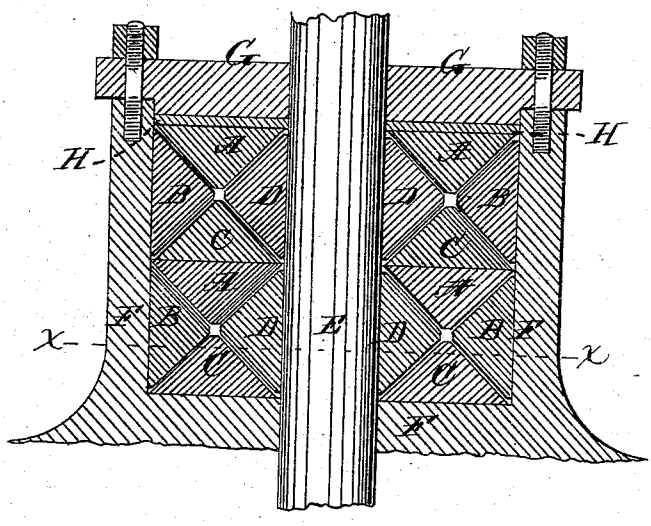
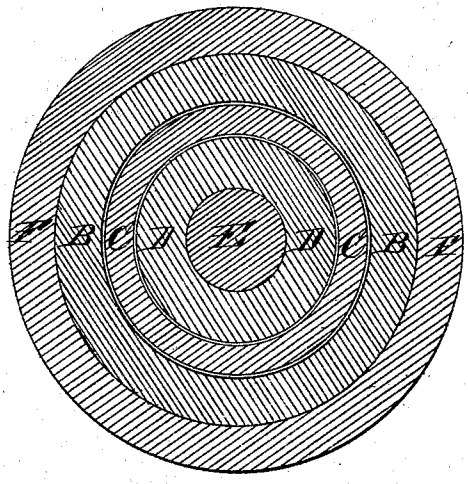


Fig. 2.



WITNESSES:

W. L. Simpson.

Joseph J. Sullivan.

INVENTOR

Charles D. Stevens

BY G. G. Linaghan

ATTORNEY

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES D. STEVENS, OF BROOKLYN, NEW YORK.

METALLIC ROD-PACKING.

SPECIFICATION forming part of Letters Patent No. 271,748, dated February 6, 1883.

Application filed November 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. STEVENS, of the city of Brooklyn, county of Kings, and State of New York, have invented a new and useful improvement in metallic rod-packing for stuffing-boxes for piston-rods of steam-engines and like purposes, of which the following is such full, clear, and exact description as will enable others skilled in the art to which it most nearly appertains to make and use the same, when taken in connection with the accompanying drawings, in which—

Figure 1 is a vertical section through a packing-box and my improved packing. Fig. 2 is a horizontal section through the same at the line *x x* of Fig. 1.

The packing is formed of four separate rings, A B C D. The ring B is made of a triangular or wedge-shape cross-section having its base outward and its apex inward. The outside of the ring fits against the inside of the packing-box. The ring D is made also of a triangular or wedge-shape cross-section, having the base of the wedge inward against the piston-rod, and of such a size that the apex of one ring will meet that of the other when they are placed one within the other. The rings A and C are each made of a triangular or wedge-shape cross-section and of such a size as to fit between the ring D and ring B when so placed that the apex of each will be toward the apex of the other. The four rings are so placed that they fit together and fill a square or oblong space in their cross-section. The extreme of the angle at the apex of each is cut off and also the other angle of the rings D and B. The rings, being placed in a packing-box, after having each been cut into half or quarter circles, are provided on top with a piece of elastic packing, H, preferably, although this may be omitted. One, two, or more sets of rings may be used in filling the packing-box F, as are required by the size of the box and the rings. The box having been filled with sets of rings A B C D, a packing, H, is put on, and the head G screwed down, when it will be found that the packing has been made tight.

The advantages that this form of packing has over any other is that the pressure of the triangular rings A and C against the rings B and D causes both edges of the rings B D to press against the rod, and the same pressure is maintained when the rod moves in one direction as in the other. So soon as the pressure of the ring D against A stops by the change in the motion of the rod it is forced against C with equal force, as the angles of the rings A and C are equal.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in metallic rod-packing, of an outside ring having a triangular cross-section, an inside ring having a triangular cross-section, and two triangular rings interposed between them, as specified.

2. The combination, in metallic rod-packing, of four rings, the apex of each of which meet in a common center, substantially as specified.

CHAS. D. STEVENS.

Witnesses:

G. G. FRELINGHUYSEN,

JOSEPH J. SULLIVAN.