(No Model.)

A. SNYDER.

CROSS HEAD FOR COMPRESSORS.

No. 373,381. Patented Nov. 15, 1887.

Fig. 1.

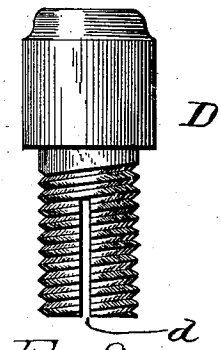
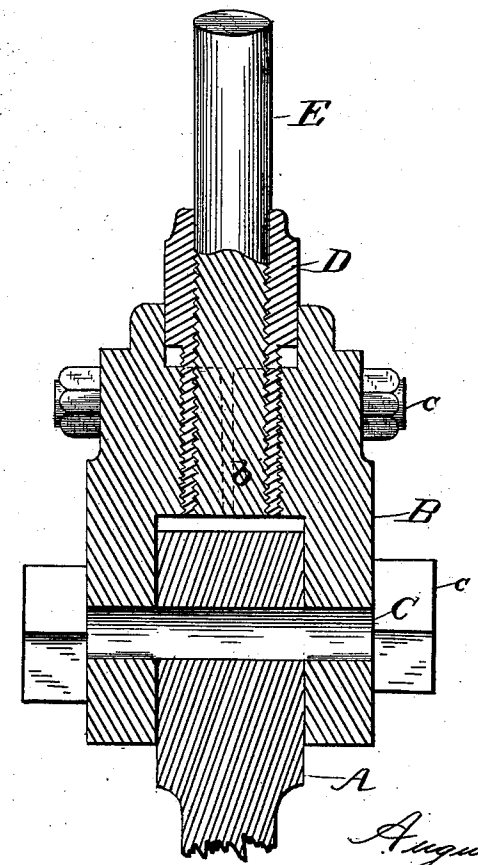


Fig. 2.



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UNITED STATES PATENT OFFICE.

AUGUST SNYDER, OF PITTSBURG, PENNSYLVANIA.

CROSS-HEAD FOR COMPRESSORS.

SPECIFICATION forming part of Letters Patent No. 373,381, dated November 15, 1887.

Application filed April 27, 1885. Serial No. 163,645. (No model.)

To all whom it may concern:

Be it known that I, AUGUST SNYDER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Cross-Heads for Compressors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to cross-heads for compressors for compressing air, gas, or vapors, and has for its object the provision of novel means for adjusting the piston-rod of the compressor-pump within the cross-head or movable part from which it receives motion.

In order to secure the maximum of efficiency in compressors, it has been found essential that the piston of the compressor-pump should come into absolute contact with the cylinder-heads at the limit of its movement in each direction. To secure this result it is necessary that the distance of the piston-head from the cross-head connecting the piston-rod and the pitman of the driving-engine should be accurately adjusted after the parts have been set up, and such adjustment having been accomplished that the parts should absolutely maintain their relative positions.

My invention consists in the novel means for adjusting the piston-rod of a compressor-pump in its cross-head, as hereinafter described and specifically claimed.

Referring to the accompanying drawings, Figure 1 is a side view of a portion of my device, and Fig. 2 a longitudinal sectional view of a portion of a piston-rod, a cross-head, and a part of a pitman, constructed according to my invention.

A designates the pitman of the driving-engine, connected in the usual manner to the cross-head B by a transverse pin, C. The said cross-head is bored out centrally, and the bore is internally screw-threaded with a left-hand thread. A sleeve-nut, D, is made to fit the said thread, and the sleeve-nut is itself internally screw-threaded with a right-hand thread, and is preferably split along one side, as at *d*.

E designates the piston-rod of the pump, screw-threaded at *e* and screwing into the sleeve-nut D.

The cross-head B is slotted or split longitudinally for a suitable distance, as shown at *b* by the dotted lines, and is provided with the transverse bolts *c c*, or equivalent clamping devices.

Operation: By turning the sleeve-nut D one way or the other the distance of the piston-head from the cross-head B may be readily and easily adjusted, and after such adjustment the parts may be rigidly fastened by means of the clamping-bolts *c c*. If at any time, from any cause, the piston should knock at either end of the cylinder, the engine may be stopped and the piston speedily adjusted by loosening the bolts *c c* and turning the sleeve-nut D, as above described, such adjustment being accomplished without dismounting any part or opening the cylinder, &c.

I claim—

In a compressor, the combination, with the driving-pitman, of the threaded piston-rod, slitted sleeve-nut, slitted or two-part cross-head, and clamping devices for the latter, said sleeve-nut and piston-rod being oppositely threaded, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

AUGUST SNYDER.

Witnesses:

T. J. MCTIGHE,

R. J. WILSON.