

(No Model.)

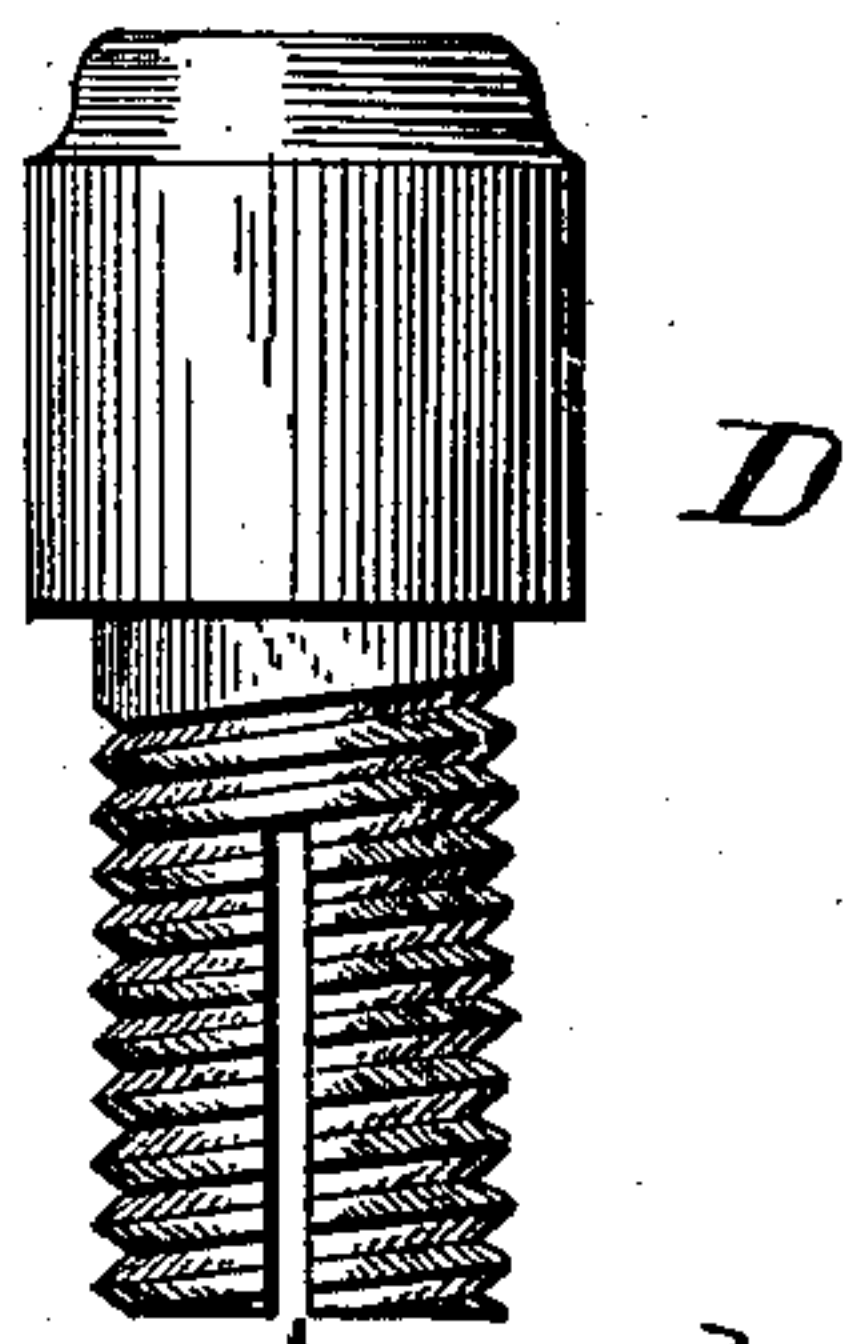
A. SNYDER.

CROSS HEAD FOR COMPRESSORS.

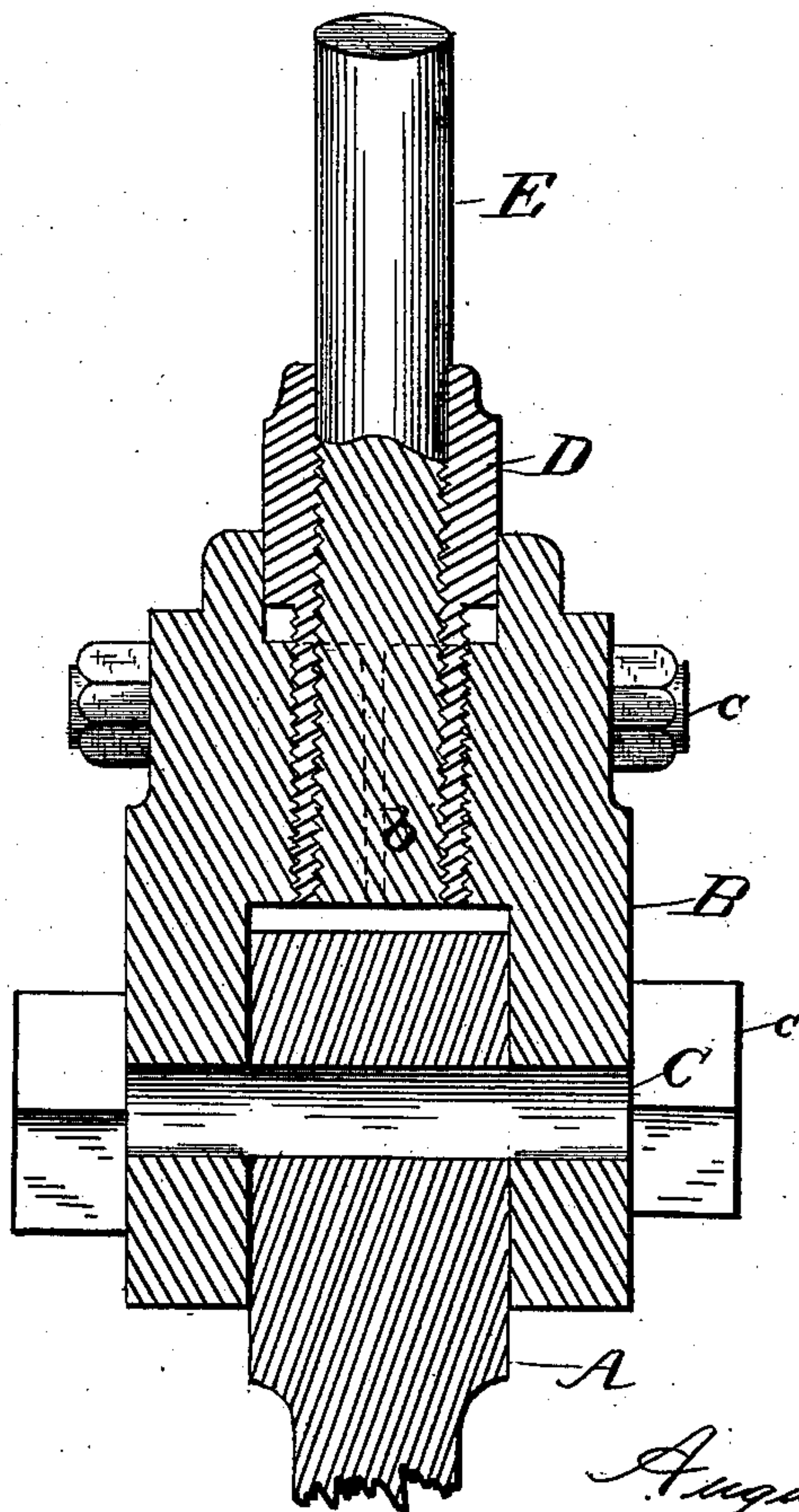
No. 373,381.

Patented Nov. 15, 1887.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

*J. B. McGinn.*

*F. A. Fouts*

*Inventor.*

*August Snyder*  
*by Connolly Bros*  
*attys*

# 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  
5 new and useful Improvements in Cross-Heads  
for Compressors; and I do hereby declare that  
the following is a full, clear, and exact descrip-  
tion of the invention, which will enable others  
skilled in the art to which it appertains to make  
10 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 va-  
15 pors, 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  
20 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 di-  
rection. To secure this result it is necessary  
25 that the distance of the piston-head from the  
cross-head connecting the piston-rod and the  
pitman of the driving-engine should be accu-  
rately adjusted after the parts have been set  
up, and such adjustment having been accom-  
30 plished that the parts should absolutely main-  
tain 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  
35 specifically claimed.

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

A designates the pitman of the driving-en-

gine, 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 45  
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 inter-  
nally screw-threaded with a right-hand thread,  
and is preferably split along one side, as at *d*. 50

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 longitu-  
dinally for a suitable distance, as shown at *b* by 55  
the dotted lines, and is provided with the trans-  
verse bolts *cc*, 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 60  
easily adjusted, and after such adjustment the  
parts may be rigidly fastened by means of the  
clamping-bolts *cc*. If at any time, from any  
cause, the piston should knock at either end  
of the cylinder, the engine may be stopped and 65  
the piston speedily adjusted by loosening the  
bolts *cc* and turning the sleeve-nut D, as above  
described, such adjustment being accom-  
plished without dismounting any part or open-  
ing the cylinder, &c. 70

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 75  
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.