

No. 856,784.

PATENTED JUNE 11, 1907.

J. KOLSTRAM.

VALVE GEAR.

APPLICATION FILED NOV. 6, 1906.

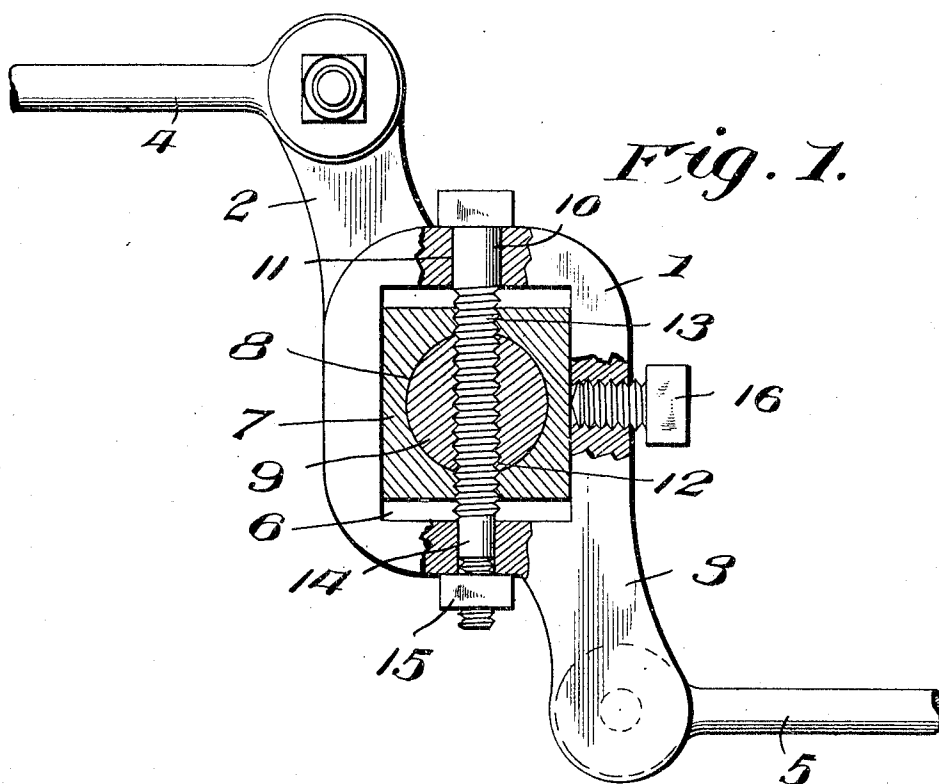
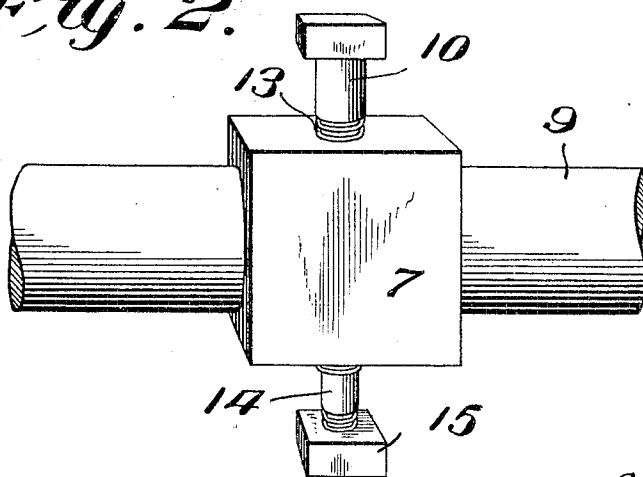


Fig. 2.



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Witnesses

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JOHN KOLSTRAM, OF GARRISON, NORTH DAKOTA.

VALVE-GEAR.

No. 856,784.

Specification of Letters Patent.

Patented June 11, 1907.

Application filed November 6, 1906. Serial No. 342,305.

To all whom it may concern:

Be it known that I, JOHN KOLSTRAM, a citizen of the United States, residing at Garrison, in the county of McLean and State of North Dakota, have invented certain new and useful Improvements in Valve-Gears; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in valve gears and more particularly to that class adapted to be used in connection with slide valves and is essentially an attachment for that form of gear known as the Wolf valve gear, and my object is to provide a device of this class which can be readily adjusted to change the stroke of the valve when desired.

A further object is to provide means for locking the changing mechanism in its adjusted position.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a side elevation of the valve gear with my improved attachment secured thereto, portions thereof being shown in section, and, Fig. 2 is a detail perspective view of my improved adjusting mechanism removed from the gear.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates the body of a valve gear to the upper and lower faces of which are secured arms 2 and 3, said arms being at the opposite sides of the vertical center of the body. Secured to the free end of the arm 2 is an eccentric rod 4 and to the free end of the arm 3 is secured a valve rod 5, said rods extending in opposite directions from each other, the rod 4 being secured to the usual form of eccentric (not shown) while the rod 5 is secured to the usual form of valve (not shown). The body 1 is provided with an oblong opening 6 in which is disposed a substantially square block 7, said block being provided with a bore 8 through which is disposed a supporting shaft 9. The block 7 is of such dimensions as to snugly engage the longitudinal walls of the oblong opening 6 so that the body 1 can be adjusted vertically on the

block 7 and to this end I have provided an adjusting bolt 10 which is disposed through registering bores 11 in the upper and lower portions of the body 1 and through threaded openings 12 in the block 7 and supporting shaft 9. A portion of the bolt 10 is provided with threads 13 which are adapted to engage the threaded openings 12 while the lower end 14 of the bolt is reduced in size and threaded to receive a locking nut 15. Directed through one side of the body 1 is a locking bolt 16, the inner end of which is adapted to engage one face of the block 7 and retain the body in its adjusted position upon the block.

In operation when it is desired to give the valve a normal stroke the body 1 is adjusted upon the block 7 as shown in Fig. 1 of the drawing, but should it be desired to give the valve a longer stroke the body 1 is lowered upon the block by rotating the bolt 10 in one direction thereby decreasing the stroke of the eccentric rod and increasing the stroke of the valve rod and when it is desired to shorten the stroke of the valve rod, the bolt 10 is rotated in the opposite direction thereby raising the body 1 with respect to the block 7 thereby increasing the throw of the eccentric rod and decreasing the throw of the valve rod. When the body has been properly adjusted upon the block 7, the locking nut 15 is directed into engagement with one side of the block thereby securely holding the body 1 in its adjusted position.

It will now be seen that I have provided a cheap and economical means for readily and quickly changing the stroke of the valve rod so that the throw of the valve may be increased or decreased and it will further be seen that I have provided means for locking the several parts in their adjusted positions.

What I claim is:

1. In a device of the class described the combination with a body and rods secured to said body, of a supporting shaft, a block surrounding said supporting shaft and disposed through an opening in the body and means extending through bores in said body, block and shaft to change the stroke of the rods secured to the body.

2. In a device of the class described the combination with a body having an elongated opening therein, and rods secured to opposite sides of said body, of a supporting shaft, a block surrounding said supporting shaft and within said opening and a threaded bolt extending transversely through said body,

block and shaft to adjust said body vertically upon said block, whereby the stroke of the rods upon the body will be varied.

3. In a device of the class described the
5 combination with a body having an opening therein and rods secured to said body; of a supporting shaft, a block on said supporting shaft and in said opening, a bolt disposed through bores in said body and threaded
10 openings in said block and supporting shaft, threads upon said bolt to engage the thread-

ed openings whereby when the bolt is rotated the body will be raised or lowered on the supporting shaft and means to lock the body in its adjusted position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN KOLSTRAM.

Witnesses:

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