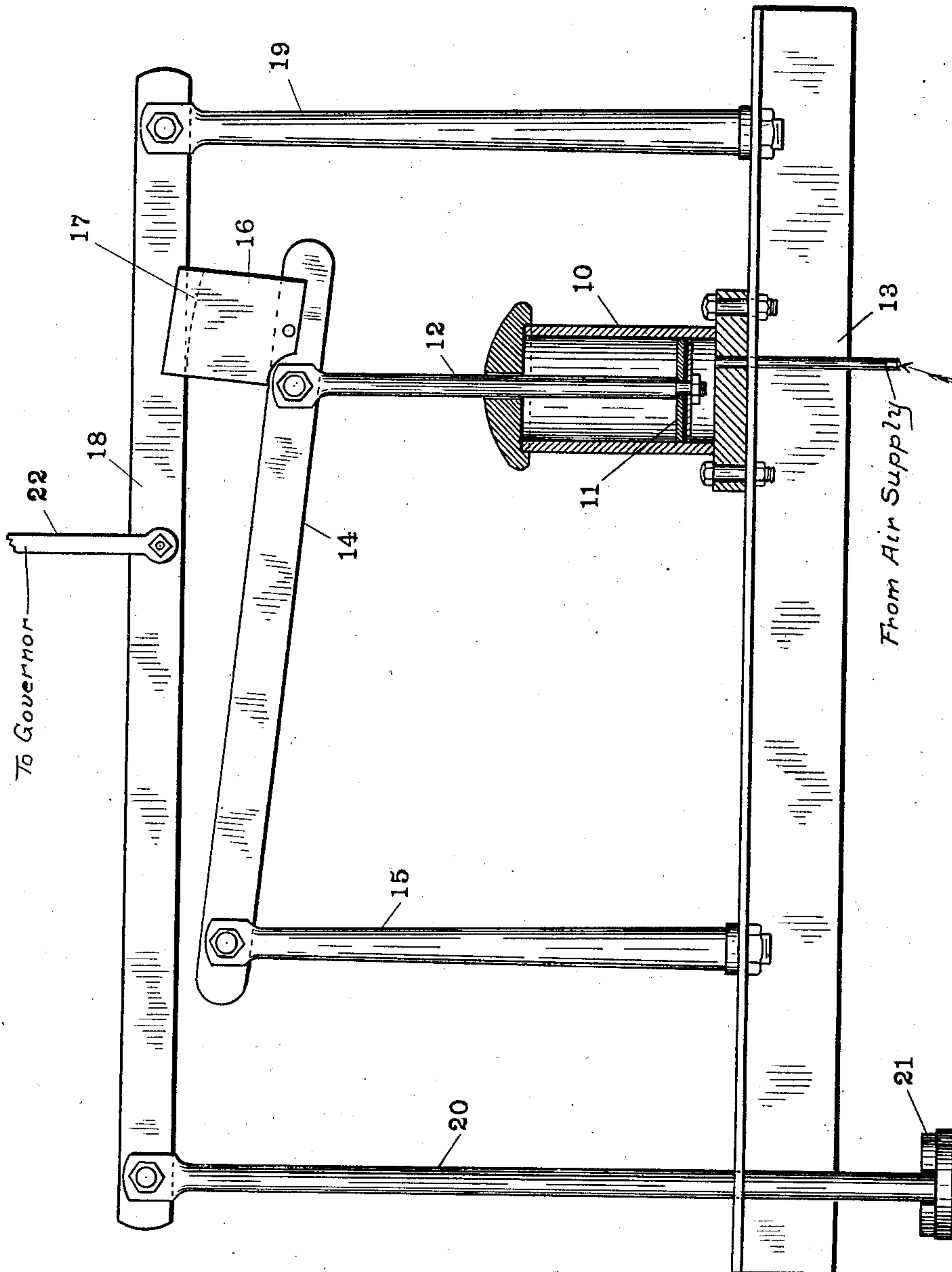


No. 753,633.

PATENTED MAR. 1, 1904.

H. SAAM.  
GOVERNOR FOR AIR COMPRESSORS.  
APPLICATION FILED JAN. 12, 1903.

NO MODEL.



Witnesses  
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## UNITED STATES PATENT OFFICE.

HENRY SAAM, OF MOHAWK, MICHIGAN.

## GOVERNOR FOR AIR-COMPRESSORS.

SPECIFICATION forming part of Letters Patent No. 753,633, dated March 1, 1904.

Application filed January 12, 1903. Serial No. 138,641. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY SAAM, a citizen of the United States, residing at Mohawk, in the county of Keweenaw and State of Michigan, have invented certain new and useful Improvements in Governors for Air-Compressors, of which the following is a specification.

The object of my invention is to produce a simple yet efficient and sensitive governor for controlling a motor driving an air-compressor, whereby a uniform pressure of air may be obtained.

The accompanying drawing, which is a side elevation in partial section, illustrates my invention.

In the drawing, 10 indicates a cylinder, in which is mounted a piston 11, carrying a piston-rod 12. Leading into the bottom of cylinder 10 beneath piston 11 is a supply-pipe 13, which leads from the compressor or from a reservoir or piping supplied by the compressor. Piston-rod 12 is loosely connected at its upper end to an intermediate point of a lever 14, pivoted at one end to a support 15. Lever 14 carries a cam-block 16, provided with a cam-face 17, (not shown,) which is adapted to engage and support a lever 18, pivoted at one end to a support 19. The opposite end of lever 18 carries a rod 20, which supports one or more weights 21, the amount of weights 21 being determined by the desired pressure to be maintained. Connected to lever 18 is a rod 22, which leads to controlling means of the motor.

It will be readily understood that the rod 22 may be connected to any controlling means—as, for instance, the knock-off blocks of a Corliss engine, &c. The air being admitted beneath the piston 11 causes said piston to rise against the action of weight 21; but as the pis-

ton rises the point of contact between the cam-block 16 and the lever 18 shifts toward the fulcrum of said lever, and thus prevents small changes in pressure from producing too great a change of shifting of position of the rod 22, and consequently of the governing means. The normal position of piston 11 is that reached when the weights 21 are balanced by the air-pressure beneath the piston.

The amount of movement of piston 11 within the cylinder 10 is comparatively small and under normal conditions is only sufficient to cause the rolling action of cam 16 on the lever 18.

I claim as my invention—

1. In an air-governor for air-compressors, the combination with a cylinder communicating with an air-supply and piston therein, of a lever, a connection between said lever and a motor-governor, a second lever connected to the piston, and a cam-block forming a connection between the two levers whereby as the piston shifts the ratio of leverage will change.

2. In an air-governor for air-compressors, the combination with a cylinder communicating with an air-supply and piston therein, of a weighted lever, a connection between said lever and a motor-governor, a second lever connected to the piston, and a cam-block carried by said second lever and supporting the weighted lever upon its cam-face, for the purpose set forth.

In witness whereof I have hereunto set my hand and seal, at Mohawk, Michigan, this 5th day of January, A. D. 1903.

HENRY SAAM. [L. s.]

Witnesses:

ALF. G. NICHOLAS,  
JAMES JACKSON.