

M. KOLP.
Shifting-Gearings.

No. 158,092.

Patented Dec. 22, 1874.

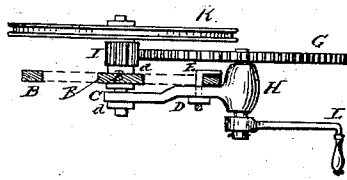


Fig. 1

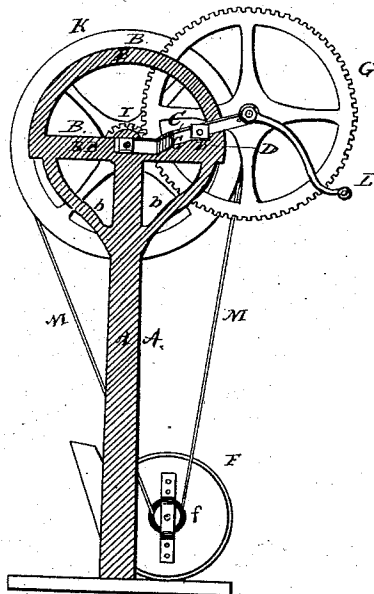


Fig. 2

WITNESSES.

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MARTIN KOLP, OF ELIZABETHTOWN, PENNSYLVANIA.

IMPROVEMENT IN SHIFTING GEARINGS.

Specification forming part of Letters Patent No. **158,092**, dated December 22, 1874; application filed November 27, 1874.

To all whom it may concern:

Be it known that I, MARTIN KOLP, of Elizabethtown, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Shifting the Gear in Blowing-Machines, of which the following is a specification:

This improvement in blowing-machines for blacksmiths consists in the facility by which the driving-wheel can be shifted from one side of the machine to the other, so as to adapt it to the hand of the operator, or not to crowd him when an assistant is employed to turn the same, by shifting the wheel onto the other side.

The accompanying drawings with the letters of reference marked thereon, and a brief description, will enable any one skilled in the art to make and use the same, in which—

Figure 1 shows the arrangement of the bearings and the gear. Fig. 2 is a front elevation with all its parts in place.

The standard A on a suitable base is provided with a cross-piece, B B, and side braces b. This cross-piece is joined on each side to a semicircular guide, B, forming the head of the standard. Through the center of the cross-piece B B, constituting the radius of the semicircle B, is the bearing for the shaft of a pinion, I, grooved strap or pulley-wheel K, as also for the shifting-arm C, with its hub or boss H for the bearing of the driving-wheel G, and crank-handle L. This shifting-arm C is pro-

vided with a clamp-hook, E, made so as to embrace the semicircular plate or head B, and slide over it from one side to the other, when relaxed from the binding-nut D, on the screw-end of the hook E, which also holds it in place. Thus the shifting-arm carries the driving-wheel G with it, so as to be in gear with the pinion I at all points, giving motion to the strap-wheel K, which connects by a strap or belt, M, with the pinion *f* on the shaft of the fan in its case F, made after any approved plan, and placed to the best advantage with reference to the hearth and standard. The object stated is thus attained, and the driving-wheel readily shifted by relaxing the binding-screw, and, when adjusted, to again tighten the same by a simple turn of the binding-nut D. The bearings or shafts are provided with washers and nuts in the ordinary way.

I claim no novelty in the gearing or fan, separately considered, the object being to overcome an objection to similar blowing-machines which have no such shifting device; therefore

What I claim as my improvement is—

The semicircular guide-head B on the cross-arm B B, shifting-arm and bearing C H, clamp-hook E with its binding-nut D, the whole arranged and operated substantially as and for the purpose specified.

MARTIN KOLP.

Witnesses:

GEO. BYROD,
JACOB S. RHODES.