

A. G. Barrett *Plane or Parallel Movement*

No. 122,145.

Fig. 1

Patented Dec. 26, 1871.

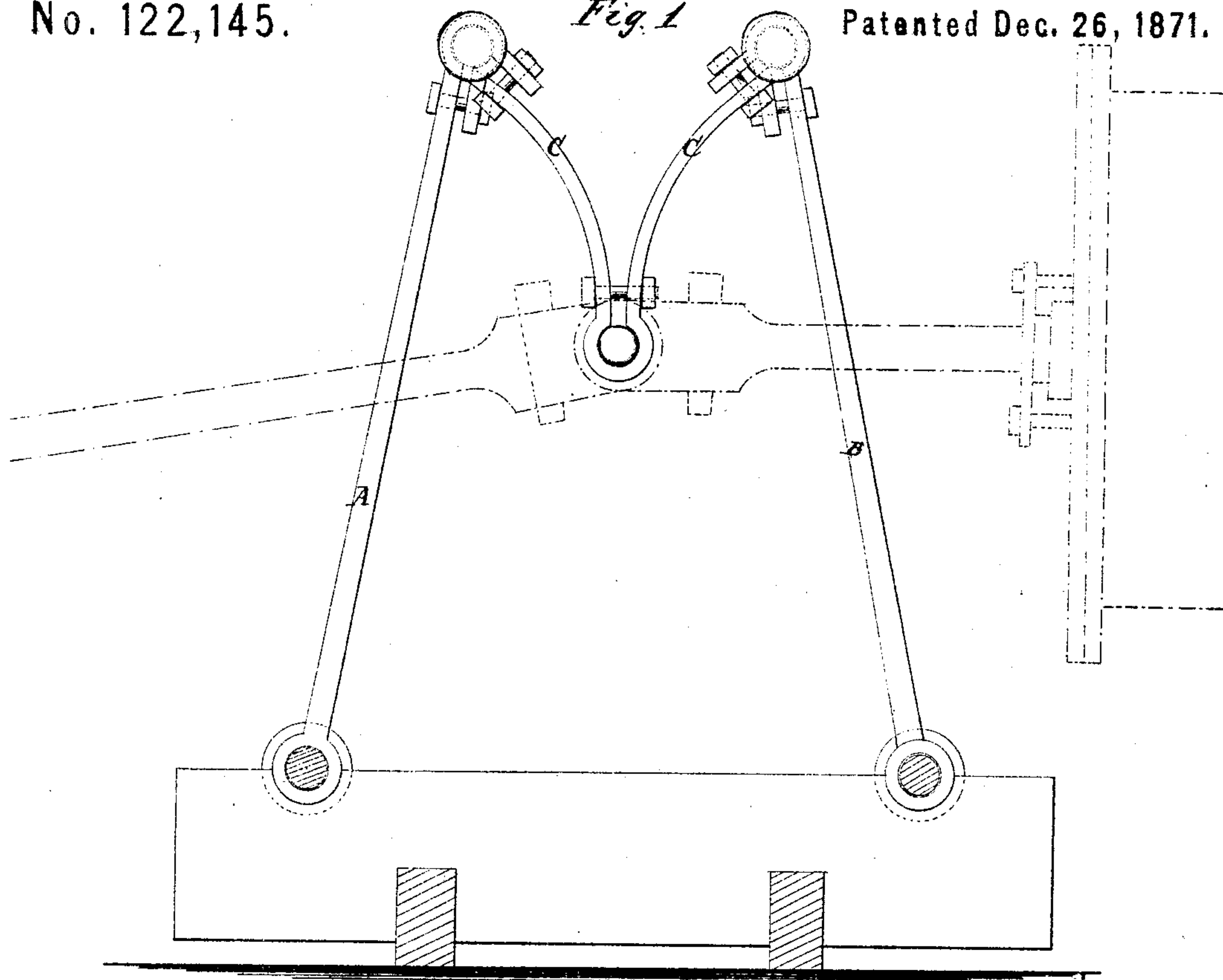
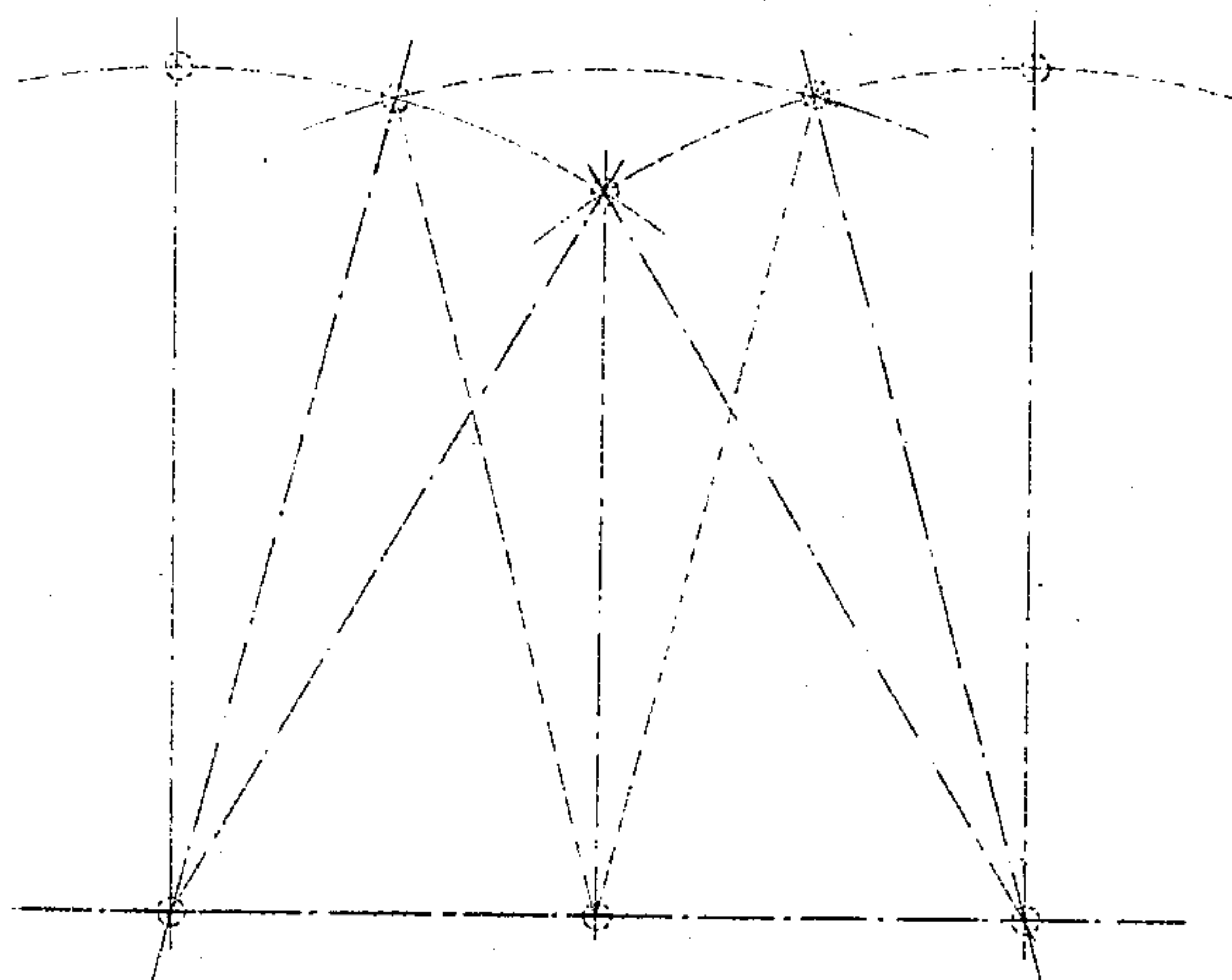


Fig. 2



Witnesses:

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IMPROVEMENT IN APPARATUS FOR PRODUCING PLANE OR PARALLEL MOVEMENT.

Specification forming part of Letters Patent No. 122,145, dated December 26, 1871.

To all whom it may concern:

Be it known that I, ALBERT G. BARRETT, of Barrett, in the county of Marshall and State of Kansas, have invented a new and useful Improvement in Plane or Parallel Movement; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side view of my improved movement. Fig. 2 is a diagram representing a plan for laying out my improved movement.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved plane or parallel movement for attachment to the piston-rod and pitman of a steam-engine, and for use in other places where slides are used, and which shall be so constructed as to greatly diminish the friction while causing the object to move in a straight line; and it consists in the movement constructed and operating as hereinafter more fully described.

A and B are two sweeps or levers, the lower ends of which are pivoted to the bed of the engine, or to some other suitable support. To the upper ends of the sweeps A B are pivoted the ends of the bar C, which is bent at its middle, so that lines joining its ends and center may form the sides of an isosceles triangle. The arms of

the bar C may be made straight or curved, and its ends may be connected by a straight or curved bar, if desired. To the center of the bar C, which is the apex of the isosceles triangle, is pivoted the end of the piston-rod and of the pitman, or the other thing, whatever it may be, that is required to be carried back and forth, in a straight line. The sweeps A B must be so arranged with respect to each other that the stroke or movement can never carry them outward beyond a vertical line. It is designed to use two sets of these bars, one upon each side of the piston-rod or other article.

By this construction the friction will be greatly diminished, the heavy cross-head being no longer required.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved plane or parallel movement, formed by the bars or sweeps A B, pivoted at their lower ends to some suitable support, and pivoted at their upper ends to the ends of the bent or curved bar C, having a bearing formed in its middle or lower part to receive the pin or bolt that pivots it to the moving object, the said parts A B C being arranged and operating substantially as herein shown and described, and for the purpose set forth.

ALBERT G. BARRETT.

Witnesses:

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