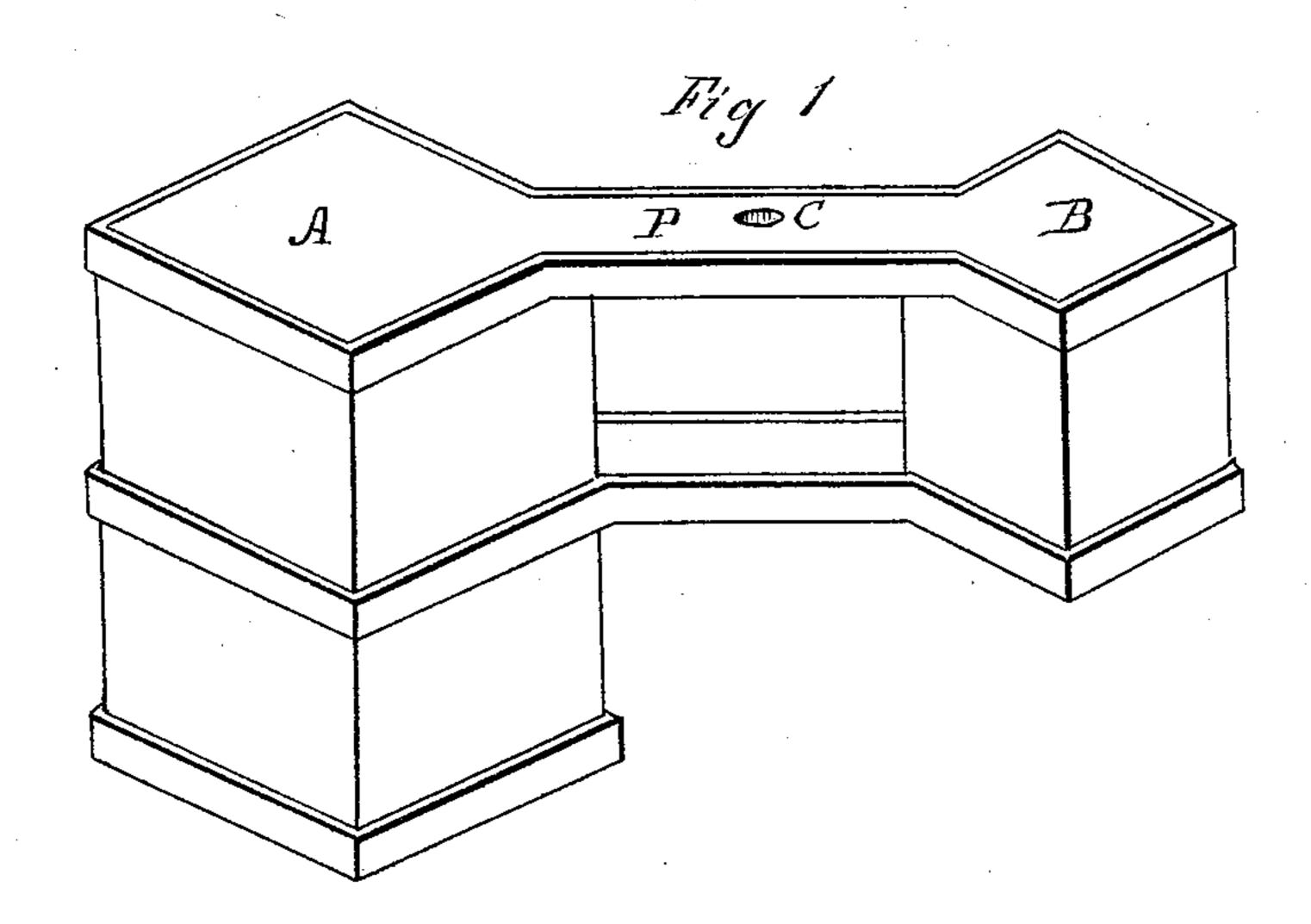
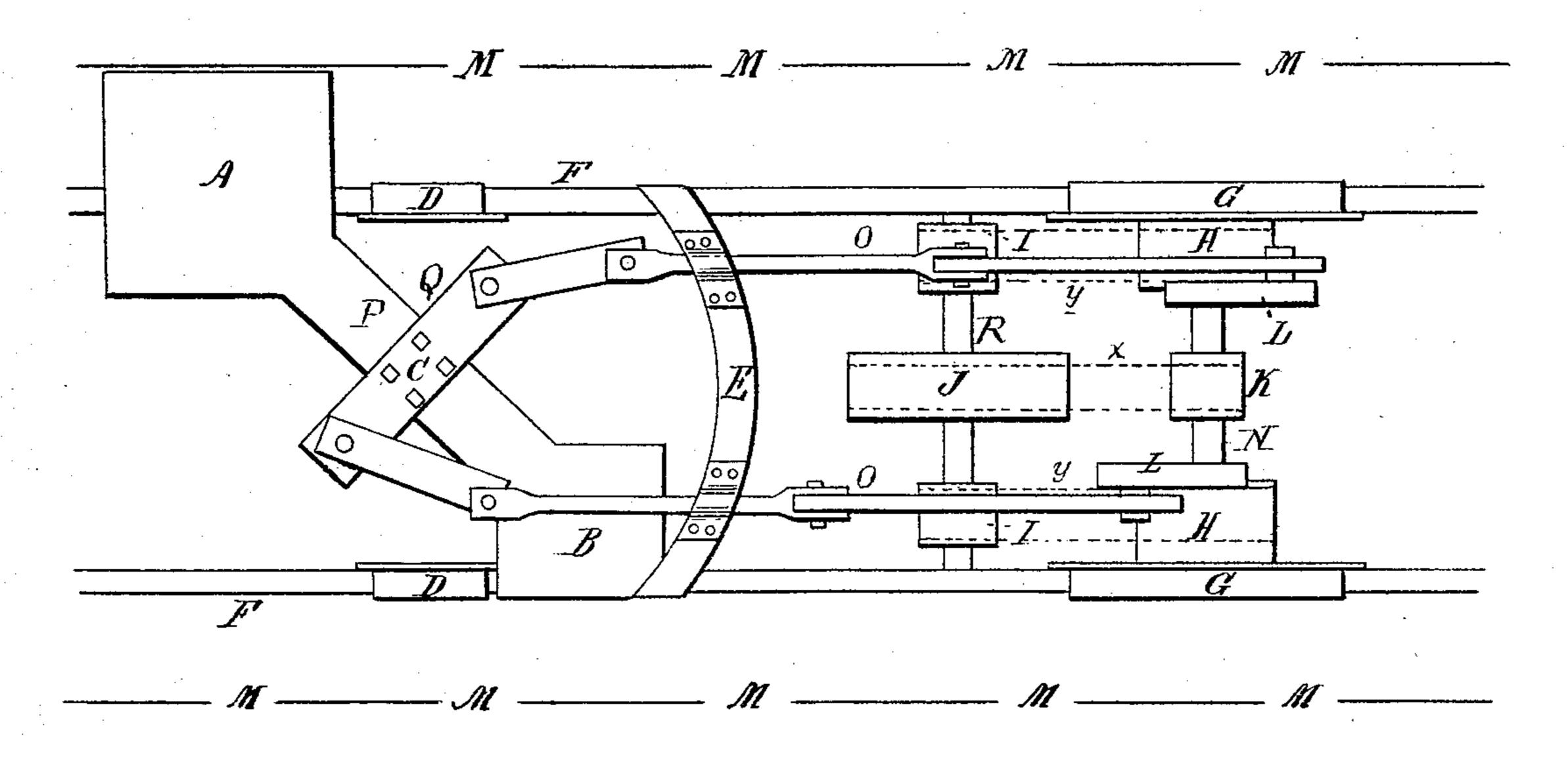
## P. GERARD. Snow-Plows.

No.149,215.

Patented March 31, 1874.





Witnesses.

Tho. J. Colayton Wilbunklallaway Inventor.

Gerard

## UNITED STATES PATENT OFFICE.

PETER GERARD, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN SNOW-PLOWS.

Specification forming part of Letters Patent No. 149,215, dated March 31, 1874; application filed June 21, 1873.

To all whom it may concern:

Be it known that I, Peter Gerard, of Philadelphia, State of Pennsylvania, have invented a Snow-Plow, of which the following is a specification:

The object of my invention, as shown in the accompanying drawing, is to rapidly remove the snow from railroads by a beating-instrument, which, working right and left in front of a locomotive, packs the snow in a straight line, M, on each side of the road.

The beater consists, in the present instance, of a cubical block, A, carried at the outer end of a vibrating lever, P, the beater being of about three feet in width, and varying in height according to the depth of the snow to be removed. The lever is arranged upon a frame or truck, or upon the locomotive, if necessary, projects beyond the front end of the same, and swings upon a vertical axis, C, a weight, B, at the inner end of the lever, counterbalancing the weight of the beater.

As the beater swings first to one side and then to the other, it carries the snow with it laterally, and packs it solidly one or both sides of the track, the movement of the beater being so limited that its face, at the end of each movement, will be parallel to the rails,

so that the banks of packed snow are in continuous lines parallel to the track.

Any suitable mechanism may be employed for imparting the vibrating motion to the beater. In the present instance, the operating mechanism consists of a double crankshaft, N, driven from the rear axle through the medium of a driving-shaft, R, and belts x y, (shown in dotted lines,) and connected to a cross-bar, Q, on the beater, by guided arms O O, each of which is connected to one of the cranks L, as shown in Fig. 2.

When it is necessary to pack the snow a second time against a bank already formed, a smaller beater or a shorter lever is substituted for that previously used, which may be done without changing the operating mechanism.

Without limiting myself to any special form of beater,

I claim—

A track-clearing apparatus, consisting of a frame or truck carrying a beater, A, to which a vibrating motion over and across the track is imparted, as set forth.

P. GERARD.

Witnesses:

THOS. J. CLAYTON, WILBUR CALLAWAY.