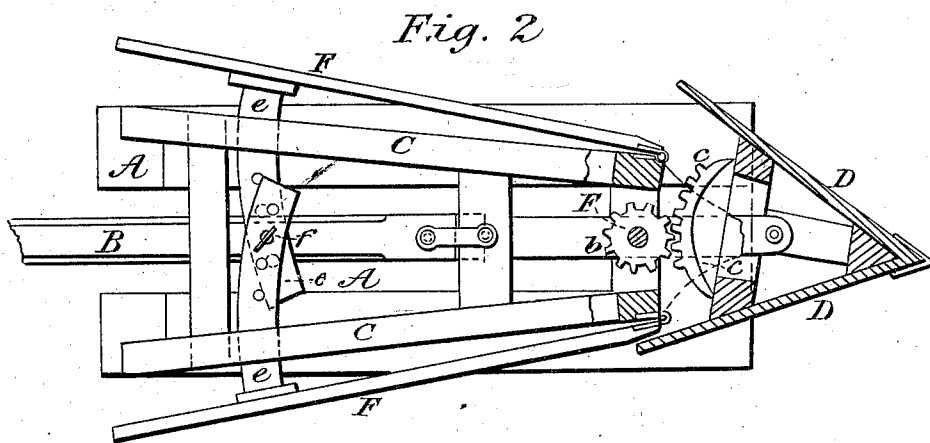
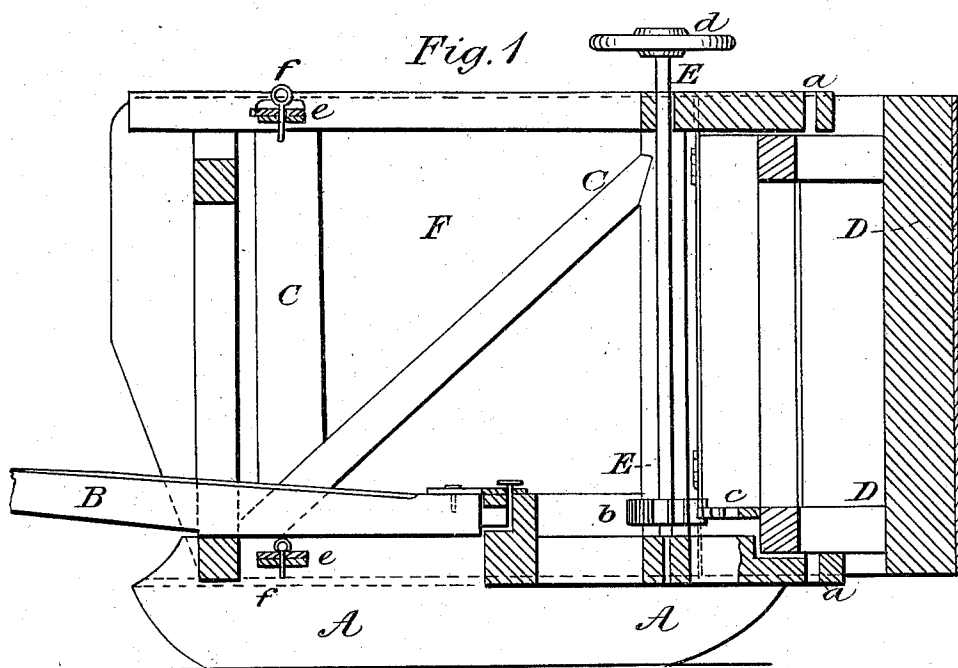


G. BEER.
Snow Plow.

No. 97,474.

Patented Dec. 7, 1869.



Witnesses:
Jno. F. Brooks,
E. Tatcl.

Inventor:
G. Beer
Mum Co.

United States Patent Office.

GOTTLIEB BEER, OF GRAFTON, WISCONSIN.

Letters Patent No. 97,474, dated December 7, 1869.

IMPROVED SNOW-PLOW.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GOTTLIEB BEER, of Grafton, in the county of Ozaukee, and State of Wisconsin, have invented a new and improved Snow-Plow; 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 drawings, forming part of this specification, in which—

Figure 1 represents a vertical longitudinal section of my improved snow-plow.

Figure 2 is a plan or top view, partly in section, of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new snow-plow, which is to be moved ahead by horses or other draught-animals, and which is provided with a steering-point, swinging wings, and with a backward-projecting pole.

The horses push the machine forward through the snow, and prepare a road of suitable width, the depth of snow remaining under the plow being regulated by the weight of the plow or depth of wings.

A is a sled with broad runners *a a*, and provided with a backward-projecting pole, B, to which a suitable number of horses may be hitched.

Upon the sled is secured a strong frame, C, which consists of posts, braces, and cross-pieces, all joined so as to produce a durable structure.

To the front end of the sled and frame is pivoted, by a pin, *a*, a frame, D, which consists of two di-

verging plates or boards that form the point of the plow, and of suitable inner braces.

E is a vertical shaft hung in the frame C, and carrying a pinion, *b*, which meshes into a toothed segment, *c*, formed on the back of the pivoted frame D.

By turning a hand-wheel, *d*, on the shaft E, the point D will be swung in the required direction to steer the plow.

F F are large plates or wings, pivoted to the sides of the frame D, close behind the back ends of the plates of D.

The wings F are pivoted or hinged at their front ends, and can be swung on their pivots, so as to bring their rear ends more or less far apart.

By adjusting the position of the wings F, the width of the road to be cleared is regulated.

The wings have inward-projecting perforated arms *e*, which can, by suitable pins *f*, be locked, to lock the wings in the desired positions.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The combination of the sled A, frame C, backward-projecting tongue B, and shaft E, with the swinging point D, and adjustable wings F F, all arranged to form a snow-plow, substantially as herein shown and described.

GOTTLIEB BEER.

Witnesses:

FRIEDERICH KOHLWEG,
RUD. SCHMIDT.