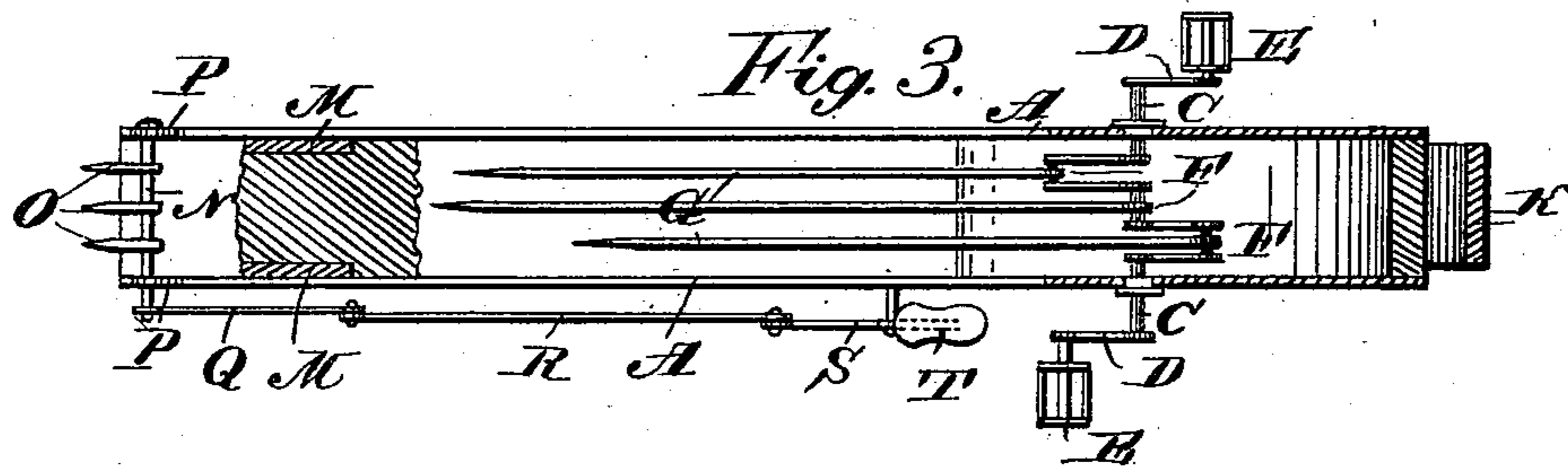
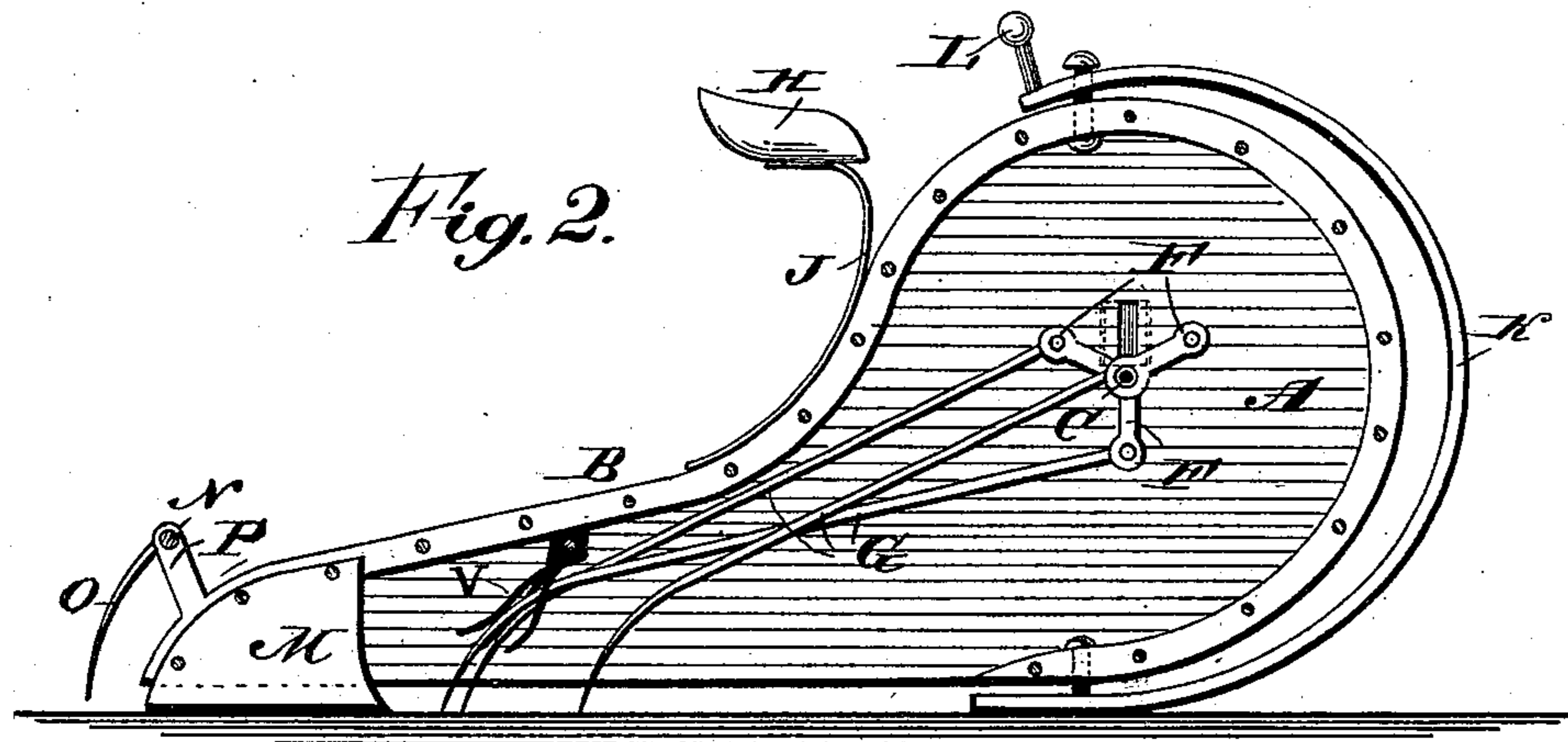
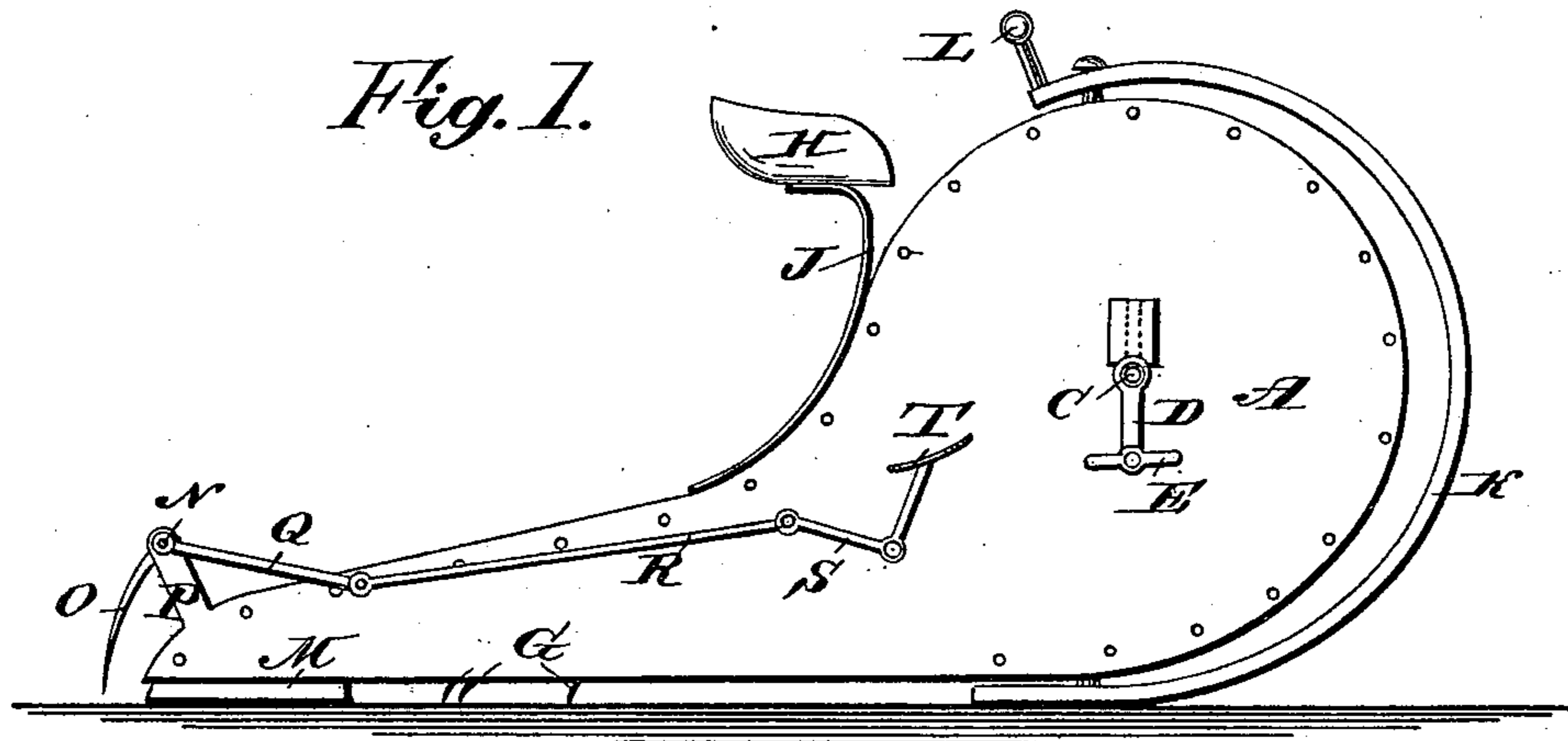


(No Model.)

D. R. IVETT.
SLED PROPELLER.

No. 282,897.

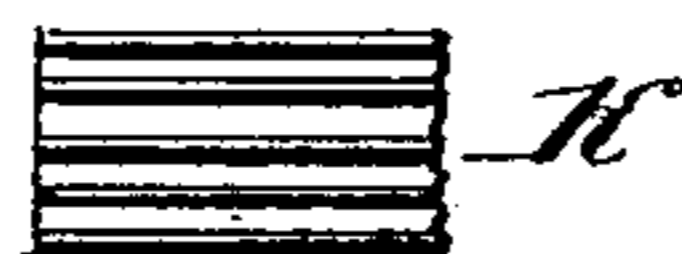
Patented Aug. 7, 1883.



WITNESSES:

Hotzinger
C. Sedgwick

Fig. 4.



INVENTOR:

D. R. Ivett

BY

Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

DANIEL RUBEN IVETT, OF FORT FRED STEELE, WYOMING TERRITORY.

SLED-PROPELLER.

SPECIFICATION forming part of Letters Patent No. 282,897, dated August 7, 1883.

Application filed March 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, DANIEL R. IVETT, of Fort Fred Steele, in the county of Carbon and Territory of Wyoming, have invented a new and Improved Sleigh, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved sleigh, which can be propelled by the person sitting on the same.

The invention consists of the combination and arrangement of parts, substantially as hereinafter fully set forth and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal elevation of my improved sleigh. Fig. 2 is a longitudinal elevation of the same with a side piece removed. Fig. 3 is a sectional plan view of the same. Fig. 4 is a plan view of the under side of the lower end of the steering-runner.

Two side pieces, A, which are preferably made almost circular at the front end and taper down toward the rear ends, are united by a top piece, B, of such width that a person can easily straddle the frame thus formed. The frame is closed at the top and front and open at the bottom.

A transverse shaft, C, is journaled in the middle of the front rounded part of the frame, and is provided at the ends with cranks D outside of the frame, which cranks have foot-rests E. The shaft C has three radial cranks, F, arranged like distances apart, and thus all projecting in different directions, on which cranks rods G are mounted or pivoted, which have their free ends pointed and curved downward, the said pointed ends resting on the ice or snow. The rods G are to be made of steel, or of wood or iron with steel points.

A seat, H, is secured to a spring, J, fastened on the top of the frame in such a manner that the person occupying it can work the cranks D.

A curved runner, K, is pivoted to the top and bottom of the front part of the frame, the lower end of the runner passing under the front part of the frame, so that the front part

of the frame rests upon the lower part of the said runner K. The bottom surface of the lower part of the runner K is grooved longitudinally, as shown in Fig. 4. The runner K is provided at its upper end with a handle, L, for turning it.

The rear end of the frame is supported by two runners, M, secured to the inner surfaces of the sides of the frame. A transverse shaft, N, provided with downwardly-projecting prongs O, is journaled in arms P on the rear end of the frame. The shaft N is provided with an arm, Q, pivoted to a connecting-rod, R, the other end of which is pivoted to the end of one shank of an elbow or bell-crank lever, S, pivoted to one side of the frame, and provided on the end of the other shank with a foot-rest, T.

A series of spring-tongues, V, project from the under surface of the top piece, B, and press the points of the rods G upon the surface of the ice or snow.

The operation is as follows: The rider occupies the seat H, and operates the cranks D by his feet, whereby the bars G will be reciprocated. In moving forward, the bars slide over the ice or snow, and then catch on the same and push the sleigh forward. The sleigh can be steered by means of the runner K, which can be turned by means of the handle L. By pressing the treadle T downward, the end of the arm Q will be raised, and the ends of the prongs O will be pressed on the ice or snow, and will retard the movement of the sleigh or stop the same entirely.

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

In a sleigh, the combination, with a frame, of the curved runner K, pivoted to the front of the frame at the top and bottom, which runner has its bottom surface at the lower end grooved longitudinally, the handle L, and devices for propelling the sleigh, substantially as herein shown and described, and for the purpose set forth.

DANIEL RUBEN IVETT.

Witnesses:

ARTHUR LEVINSOHN,
HENRY VOLKMAN.