

No. 767,260.

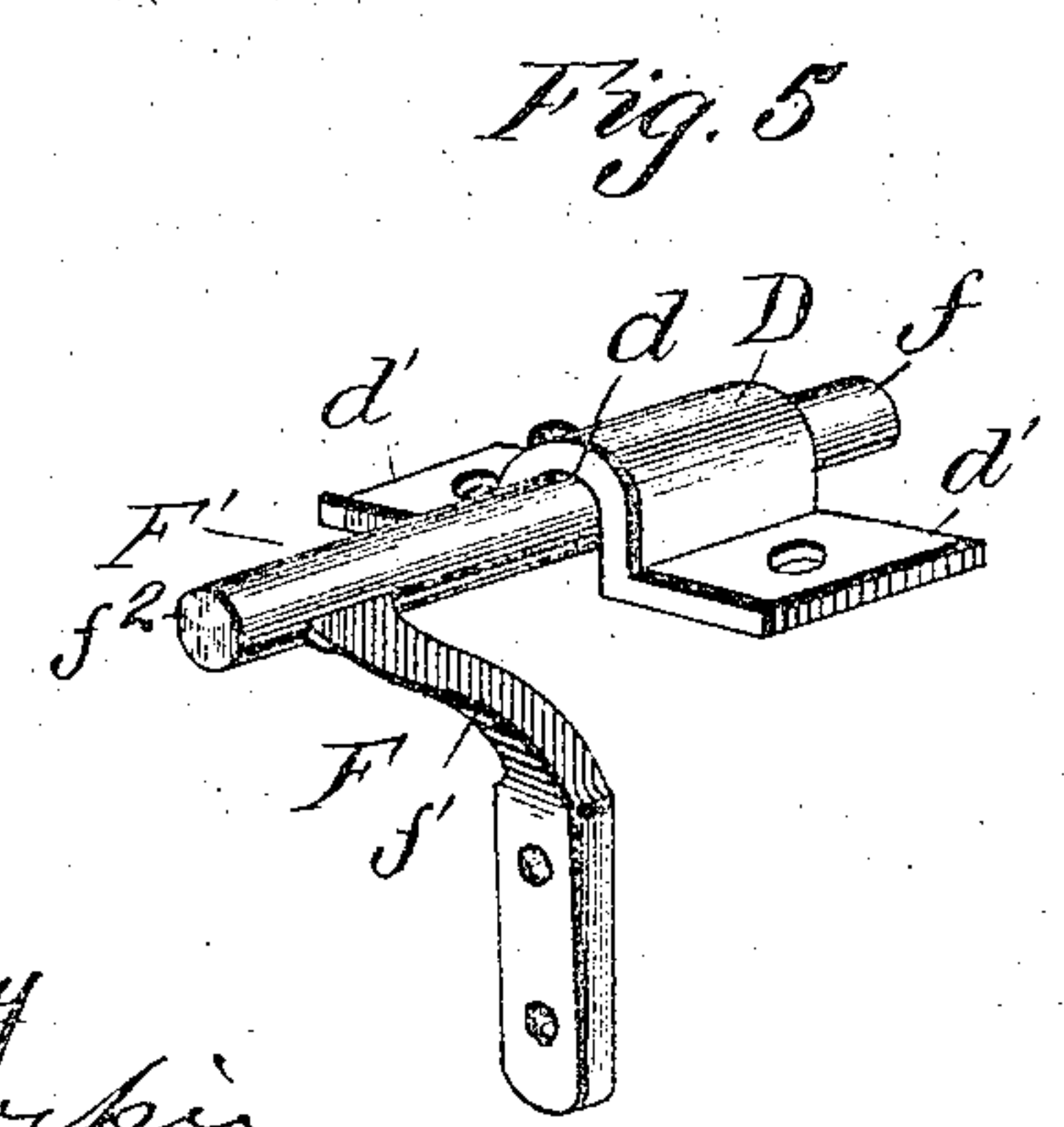
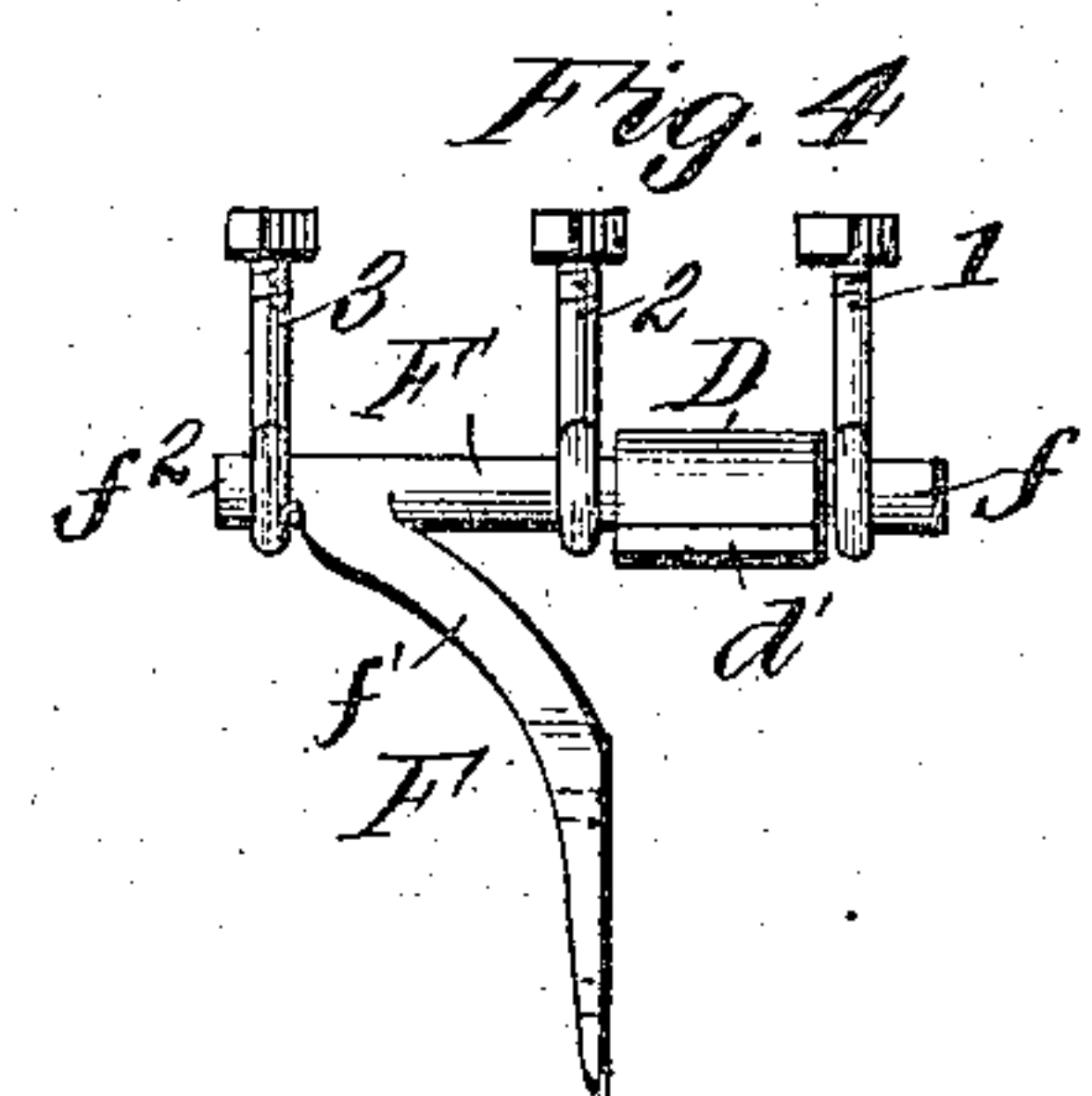
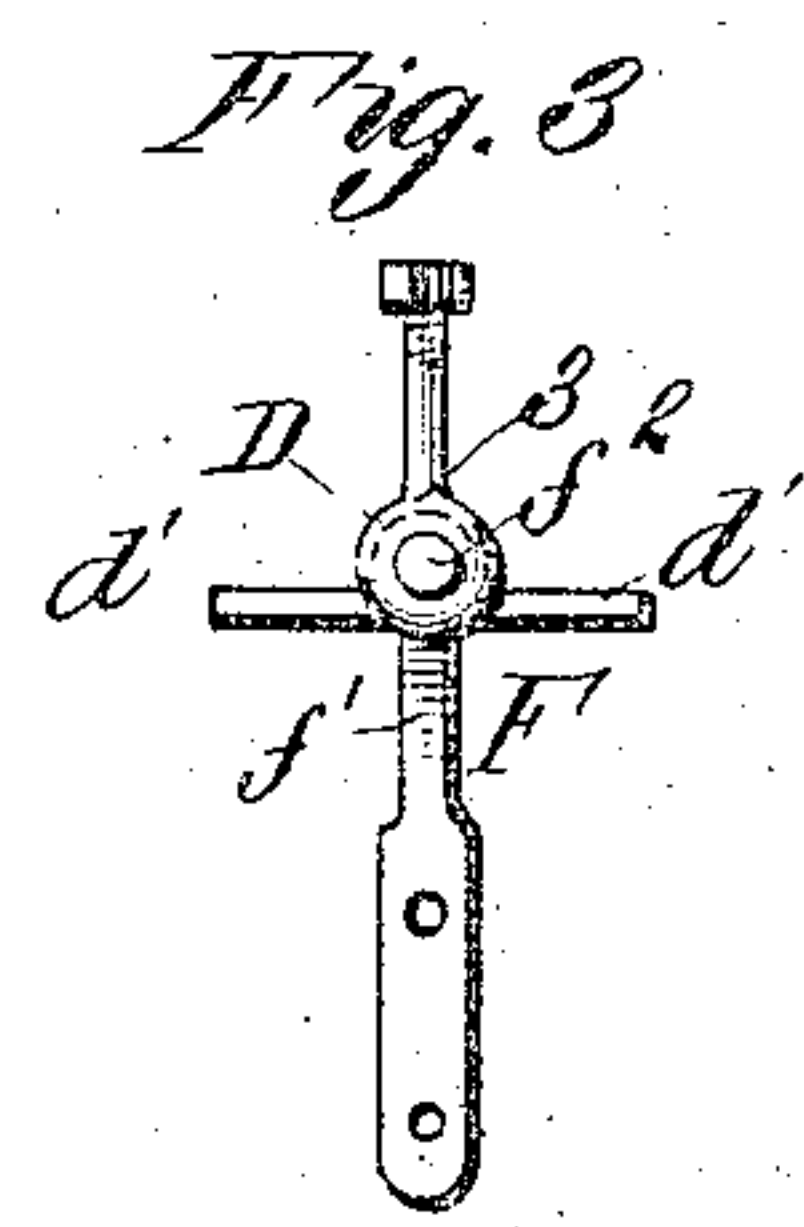
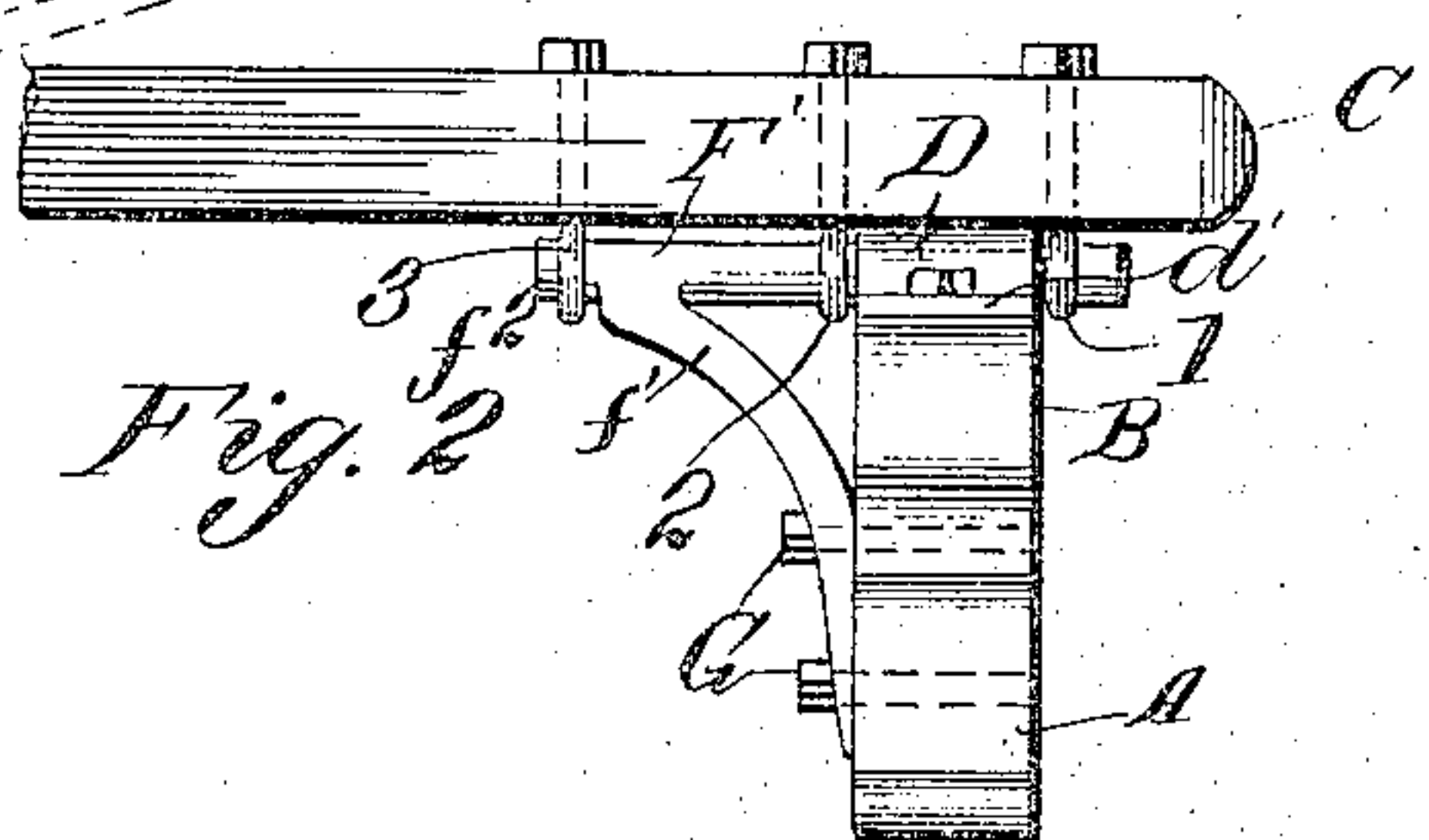
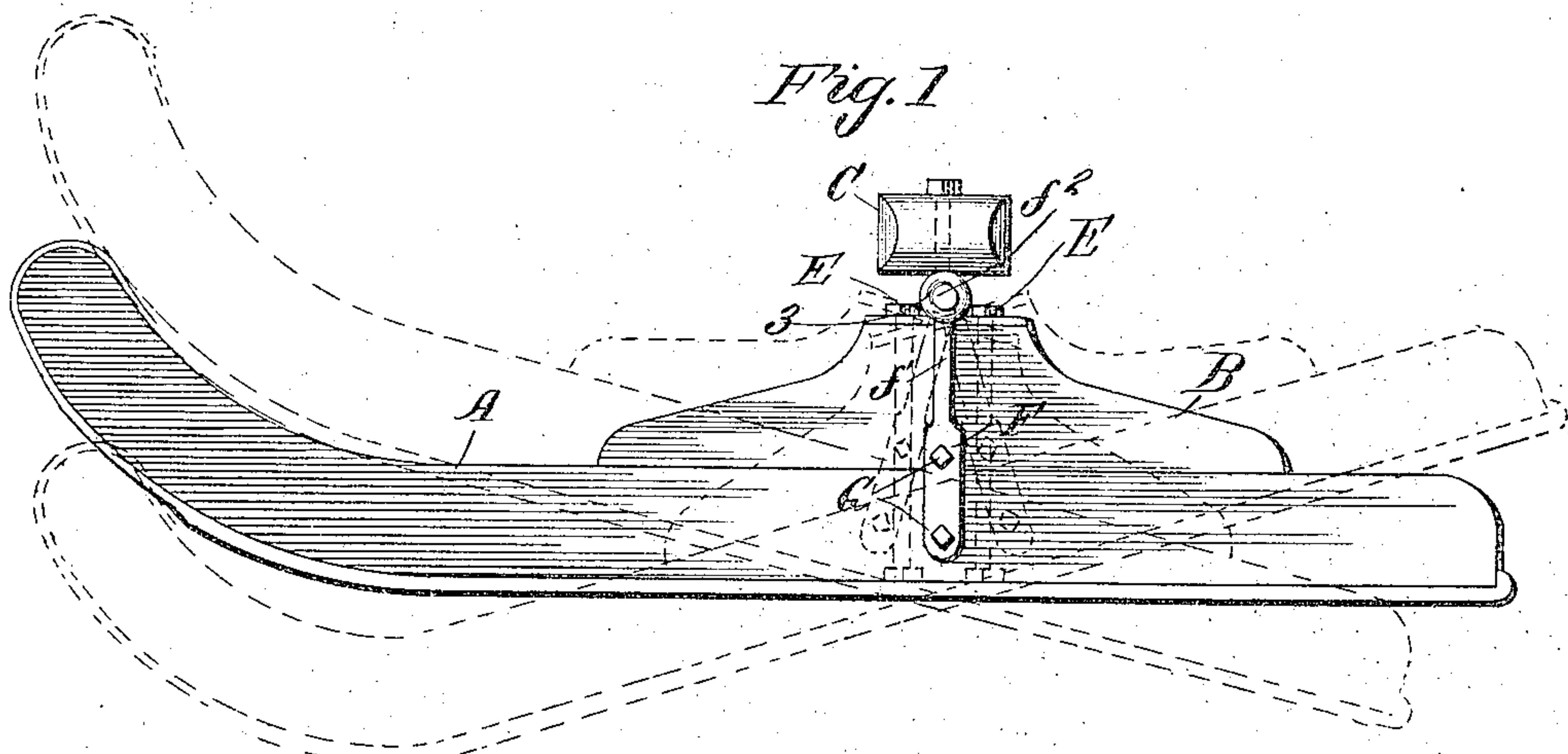
PATENTED AUG. 9, 1904.

C. E. BURNHAM.

SLED.

APPLICATION FILED APR. 18, 1904.

NO MODEL.



WITNESSES:

Edward Duffey  
Perry B. Gumpin.

INVENTOR

Charley E. Burnham  
BY *Munn & Co.*

ATTORNEYS

# UNITED STATES PATENT OFFICE.

CHARLEY ERWIN BURNHAM, OF DEKALB JUNCTION, NEW YORK.

## SLED.

SPECIFICATION forming part of Letters Patent No. 767,260, dated August 9, 1904.

Application filed April 18, 1904. Serial No. 203,969. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLEY ERWIN BURNHAM, a citizen of the United States, residing at Dekalb Junction, in the county of St. Lawrence and State of New York, have made certain new and useful Improvements in Sleds, of which the following is a specification.

My invention is an improvement in sleds, and particularly in that class of sleds ordinarily known as "bob-sleds;" and it consists in certain novel constructions and combination of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a side view of a sled embodying my invention; and Fig. 2 is an end view thereof, the beam being partly broken away. Fig. 3 is a side view, and Fig. 4 an end elevation, and Fig. 5 a detail perspective view illustrating the knuckle-joint between the beam and the runner and its riser.

The sled, as shown, is formed with the runner A, riser B, and beam C. Upon the riser B is mounted the bearing D, having the opening *d*, in which the shaft of the knuckle-bracket is held, and the lugs *d'*, through which pass the bolts E, by which said bearing-plate is securely held to the runner and riser, as will be understood from Fig. 1 of the drawings.

The bracket F is of a special construction, having the top shaft F', which is held in the bearing-plate D, extends at one end *f* outwardly beyond the bearing-plate D to receive the eye 1, extends at its opposite end beyond the inner side of the upright to receive the eye 2, has near its inner end the depending outwardly-projecting brace *f'*, integral with the shaft F' and bolted at its lower end at G to the runner and riser and provided with the extension *f''* at its inner end beyond the union of the bracket *f'* with the shaft F', such extension *f''* receiving the eye 3, as best shown in Figs. 2 and 4 of the drawings. The eyes 1, 2, and 3 are on bolts which extend upwardly through the beam C and are held by nuts or in any other desired manner. The knuckle-bracket F, it will be noticed, is thus held rigidly to and is braced securely from the runner and the riser and has at its oppo-

site ends portions to fit in the eyes connected with the beam and is also arranged intermediate its ends to fit in the intermediate eye 2, so that the knuckle-bracket affords a secure pivotal connection between the runner and the beam, so the runner can freely rock in the directions indicated by the dotted lines in Fig. 1 in order to pass over any obstruction and to accommodate itself to any rough surfaces in its path.

The construction is also quite simple, can be cheaply made, easily applied, will be durable when applied, and can be repaired at slight cost should repairs become necessary. It will be noticed, however, that the extreme simplicity of the device not only reduces its initial cost, but also reduces the probabilities of repairs being needed.

It will also be noticed that the opposite runners work entirely independently, and the beam may support the load on a level, as desired.

In practice the knuckle-brackets may be forged of steel and can be strongly and durably made, and it will be understood that in practice the shaft F' of the bracket F is welded to the bearing D.

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

1. The improvement in sleds herein described, comprising the runner, the riser thereon, the bearing-plate secured upon the riser and having an opening for the shaft of the knuckle-bracket, the knuckle-bracket having the upper shaft held in the bearing-plate on the riser and projecting outwardly beyond said bearing-plate to receive an eye and also projecting inwardly beyond said bearing-plate and having at the inner side of the riser a brace inclining downwardly and toward the runner and riser, said brace being set sufficiently far from the bearing-plate to permit the application of an eye between said bearing-plate and the union of the brace with the shaft, and the shaft having an extension inwardly beyond such union of the brace therewith to receive an eye, the beam, and the eye-bolts secured to the beam and provided below the same with eyes encircling the shaft of the



knuckle-bracket at the inner and outer ends of said shaft and at a point intermediate the brace of the knuckle-bracket and the bearing-plate on the riser, substantially as and for the purposes set forth.

2. In a sled the combination with the runner and the riser or upright thereon, of a bearing-plate secured on said riser and having an opening for the shaft of the bracket, and the bracket having a shaft held in said bearing-plate and at the inner side of said bearing-plate a brace connecting the shaft with the runner and securing said shaft rigidly to the runner, the beam and connecting devices between the shaft of the knuckle-bracket and the beam, substantially as set forth.

3. The combination in a sled, of the bearing-plate, the bracket having a shaft at its upper side, and a brace depending therefrom, the shaft having a projection inwardly beyond said brace, the runner, the beam and devices connecting the beam with the shaft of the knuckle-bracket the said shaft being secured rigidly to the runner, substantially as set forth.

4. The combination with the runner and the knuckle-bracket connected therewith and having an inclined brace and a cross-shaft at the upper end thereof and extending in both directions beyond its union with the brace, the beam and the eyebolts receiving said shaft of the knuckle-bracket and connecting the same with the beam, substantially as set forth.

5. A sled-knuckle comprising a bearing-plate for application to the riser, and a bracket fitted to said bearing-plate and having a cross-shaft and an inclined brace, and eyebolts for connecting the cross-shaft of the bracket with the sled-beam, substantially as set forth.

6. In a sled-knuckle, a bracket having a cross-shaft, and an inclined brace united rigidly with said cross-shaft at a point near one end of the latter the shaft having an end portion projecting beyond such union of the brace therewith, substantially as set forth.

CHARLEY ERWIN BURNHAM.

Witnesses:

FRANK B. WILLIAMS,  
J. S. GILSON.