

No. 628,844.

Patented July 11, 1899.

A. D. POLLEYS.

SLEIGH BRAKE.

(Application filed Jan. 24, 1899.)

(No Model.)

Fig. 1,

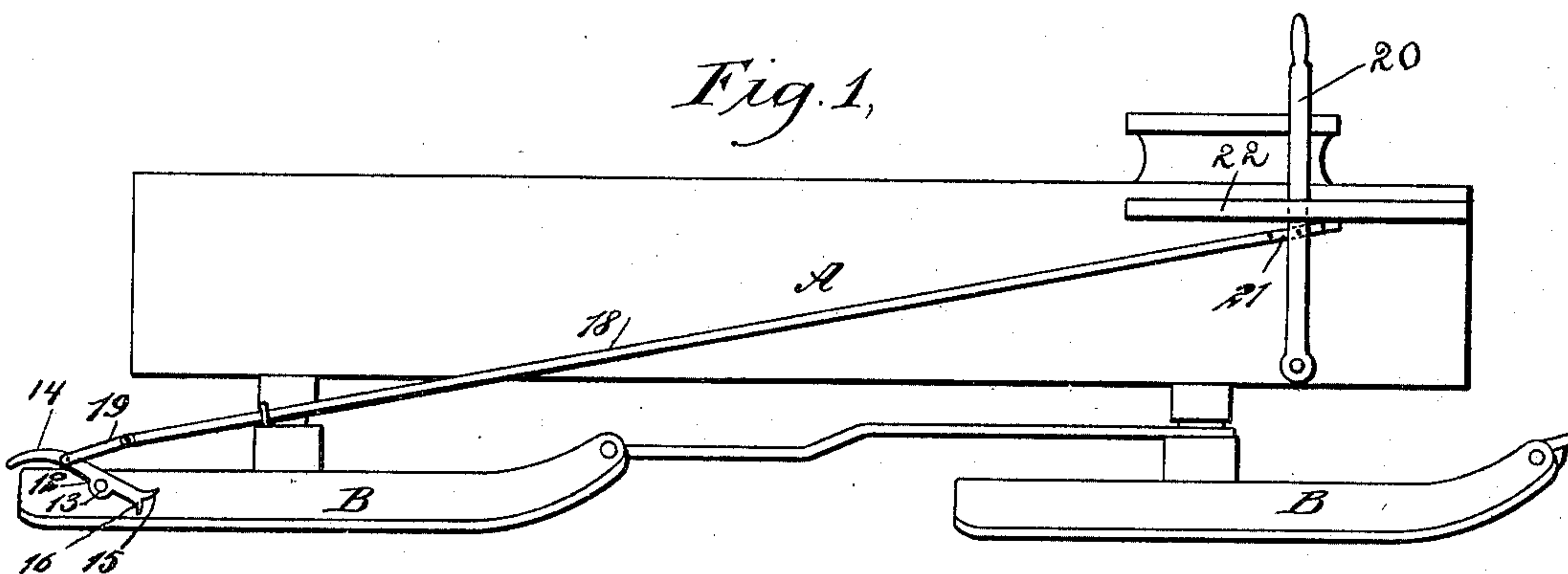


Fig. 2,

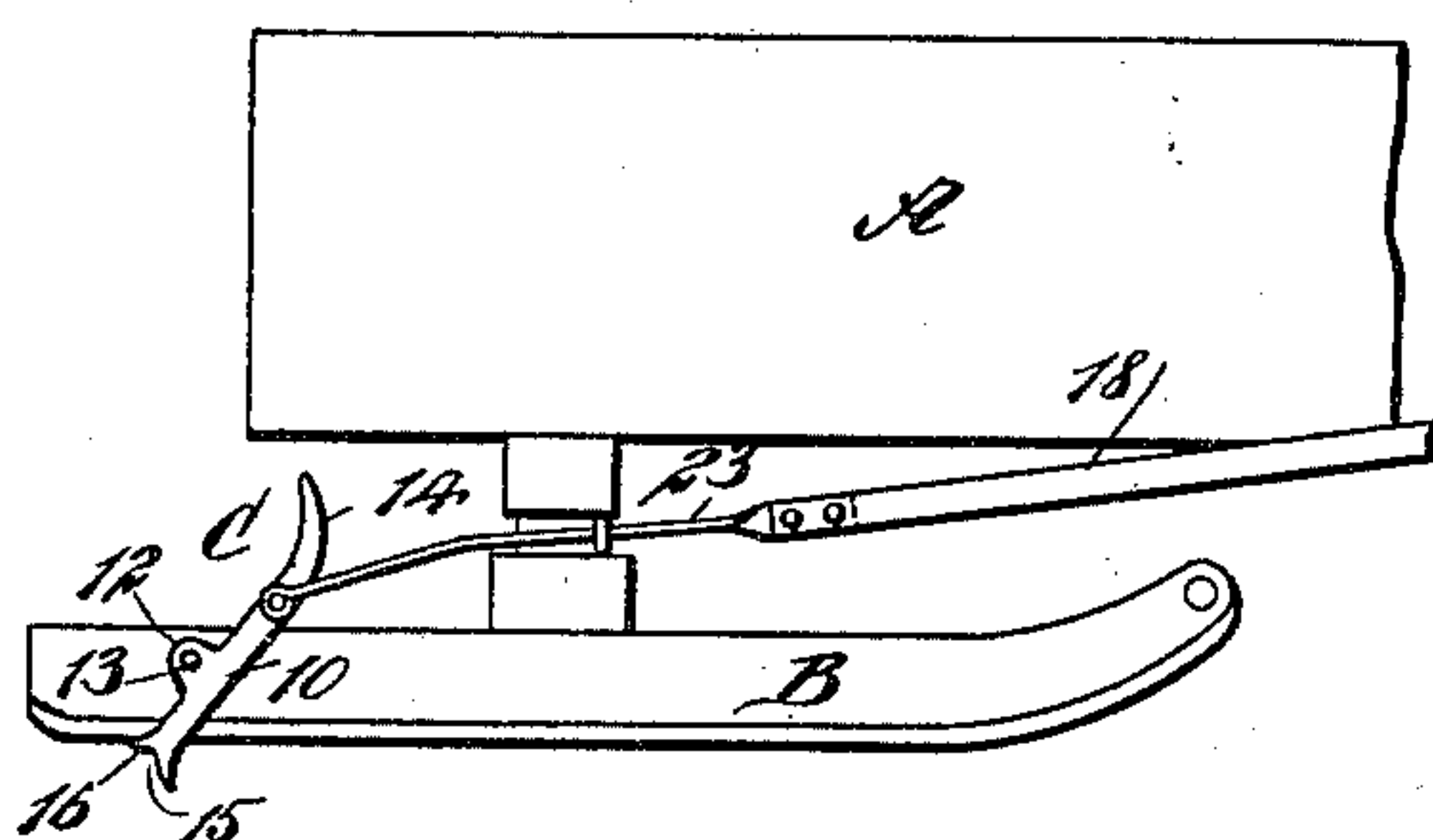


Fig. 3.

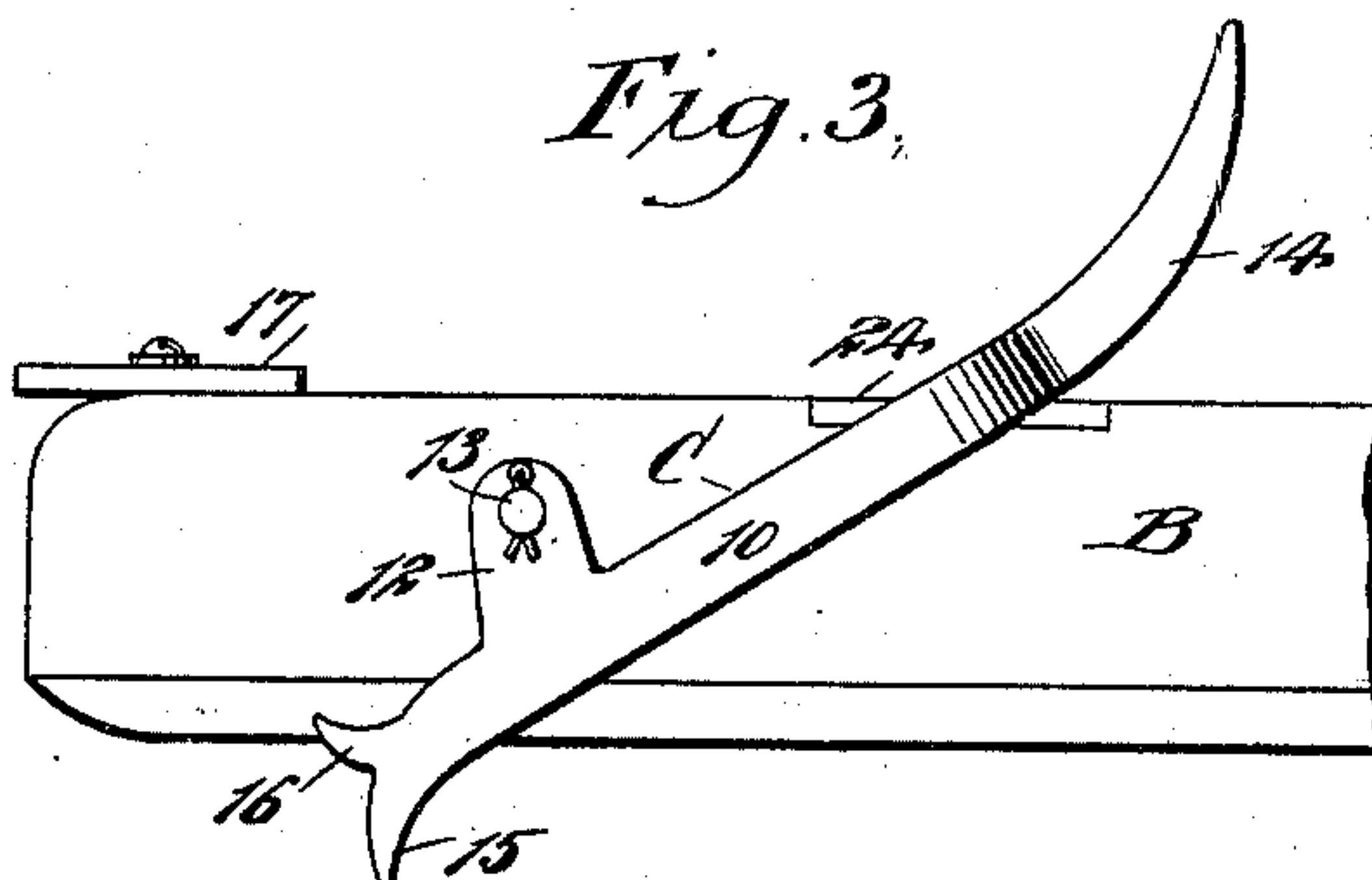


Fig. 4,

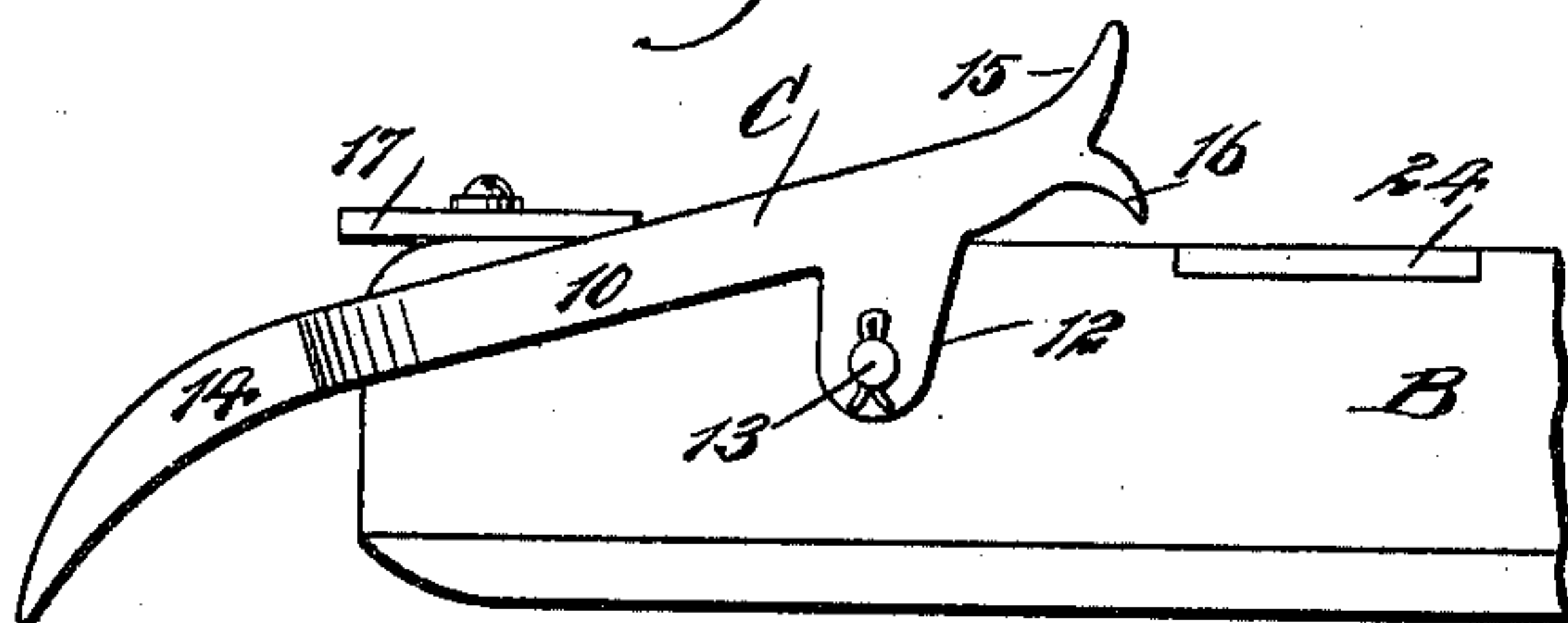


Fig. 5.

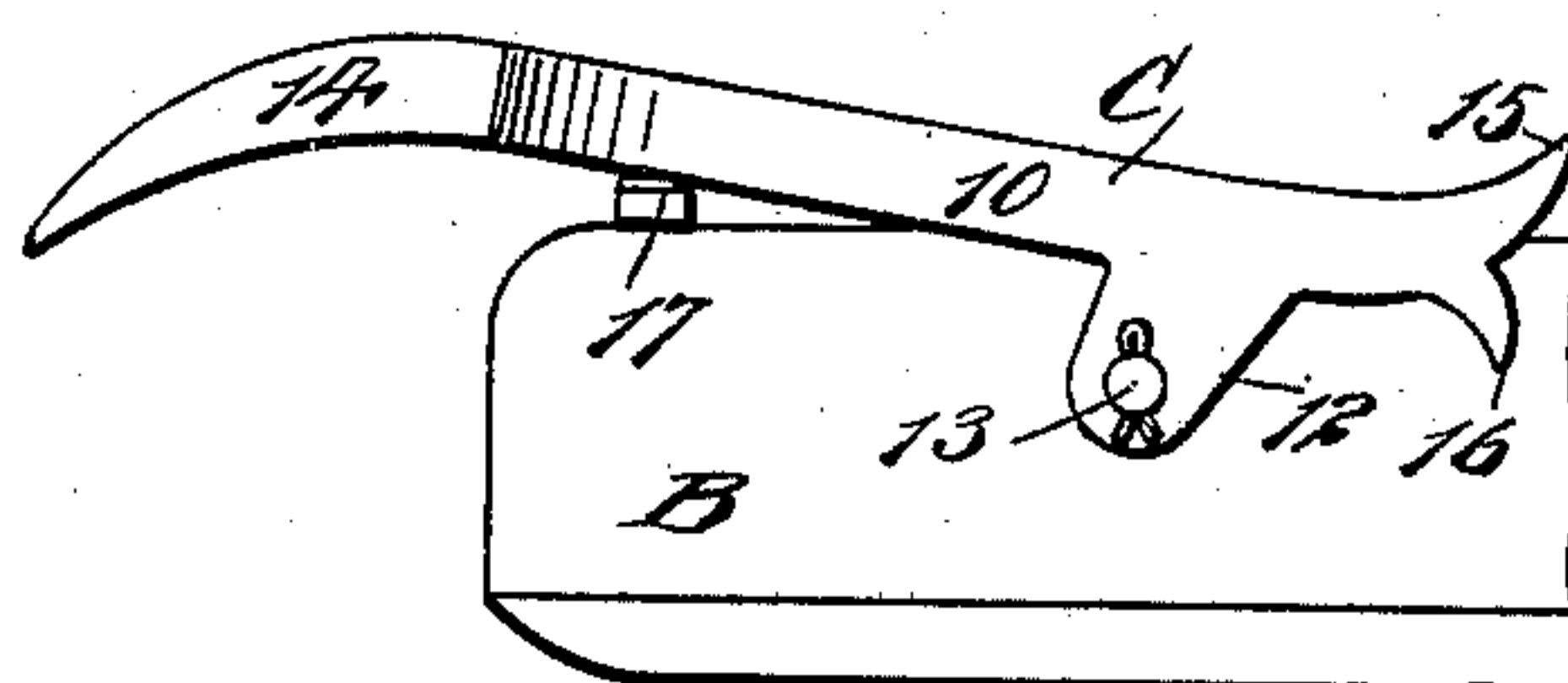
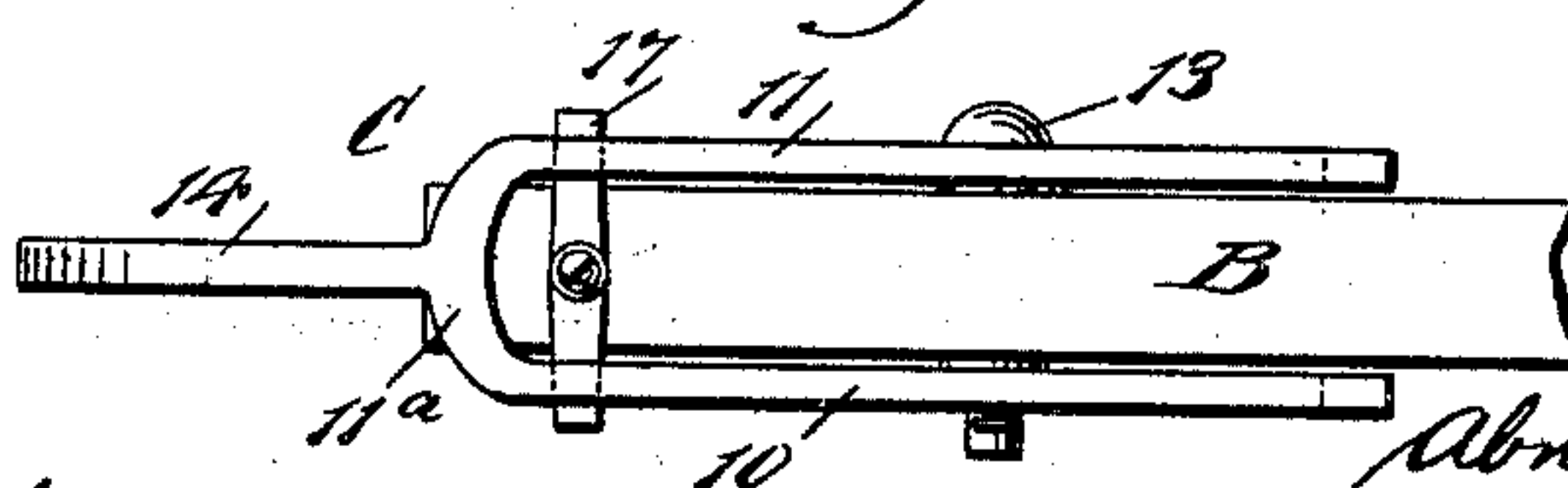


Fig. 6.



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ABNER DEXTER POLLEYS, OF MELROSE, WISCONSIN.

SLEIGH-BRAKE.

SPECIFICATION forming part of Letters Patent No. 628,844, dated July 11, 1899.

Application filed January 24, 1899. Serial No. 703,278. (No model.)

To all whom it may concern:

Be it known that I, ABNER DEXTER POLLEYS, of Melrose, in the county of Jackson and State of Wisconsin, have invented a new and Improved Sleigh-Brake, of which the following is a full, clear, and exact description.

The object of the invention is to provide a brake for sleighs capable of operation to retard a sleigh when descending a hill and prevent the sleigh from slipping backward if the team is stopped when ascending a hill.

Another object of the invention is to provide a brake capable of being operated by a lever or directly by hand and which in either event may be held in an inoperative position as long as desired.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a side elevation of a sleigh and its runners, illustrating the improved brake applied thereto and constructed to be operated by a hand-lever, the brake being raised. Fig. 2 is a side elevation of the rear portion of a sleigh-brake and lever-operating device, the brake being shown applied. Fig. 3 is an enlarged side elevation of a runner and the improved brake without the lever attachment, the brake being in position to retard the vehicle when descending a hill. Fig. 4 is a view similar to Fig. 3, the brake being in position to prevent the vehicle slipping when ascending a hill. Fig. 5 is a view similar to Figs. 3 and 4, the brake being shown in a position of rest; and Fig. 6 is a plan view of the rear portion of a runner and the brake, the brake being in the position shown in Fig. 5.

A represents the body of the sleigh, and B its runners.

The brake C is provided with a bifurcated body comprising two parallel members 10 and 11, each member being provided between its center and one end with an ear 12. The members are connected at their ends farthest from the ears by a member 11^a, as shown in Fig. 6, and when the brake is placed upon a

runner B it is located near the rear end of the runner, and the connecting member occupies such a position that it will extend across the top of the runner. A curved arm 14 is projected outwardly from the center of the connecting member of the brake, and each side member 10 and 11 at its free end is provided with a horn 15, curved in an opposite direction to that of the arm 14. A spur 16 is located adjacent to each horn 15 of the side members of the brake, and said spurs are curved in a reverse direction to the horns, the horns and spurs constituting the free terminal portions of the parallel members of the brake. The complete brake is pivotally secured to a runner by a pivot-bolt 13, that is passed through the ears 12 and the runner, being secured in position in any approved manner.

A button 17 is pivoted upon the upper rear portion of the runner when the brake is to be operated directly by hand or without the aid of a hand or foot lever. When the button is placed transversely of the runner, the side members of the brake rest thereon, as shown in Figs. 5 and 6, the arm 14 projecting rearwardly. In this position the brake is held inactive.

When the brake is to be brought into action to control the sleigh in descending a hill, the horns 15 are made to extend below the runner, as illustrated in Figs. 2 and 3, and when the brake is to be used to check the slip of the sleigh in ascending a hill the arm 14 is brought to such position that it extends downward behind the rear of the runner, as shown in Fig. 4. When the brake is in the position shown in Fig. 3, it may be carried to an inoperative position by simply backing the sleigh, the button 17 being crosswise of the runner, whereupon the horn 15 will throw the arm 14 upward and rearward to a certain extent, and as soon as the spur 16 is brought in engagement with the snow the arm 14 will be thrown so far rearward that the body of the brake will be supported upon the button 17, as shown in Figs. 5 and 6.

In the further description of the operation of the brake by hand let it be supposed the brake is in the position shown in Fig. 5. Upon lifting the curved arm 14 until it

reaches practically a perpendicular position the spurs 16 are brought in contact with the snow, and the forward movement of the sleigh will throw the spurs rearward and will bring the horns 15 into the snow, practically locking the brake in desired position for descending a hill. In order to disengage the brake, as has been described, the sleigh need be backed but a few inches, whereupon the spurs 16 will again be brought in engagement with the snow, and the bifurcated ends of the brake will be carried forward past the center of gravity, causing the body portion of the brake to rest upon the button 17. In Fig. 2 the brake is shown practically in the act of changing from the position shown in Fig. 3 to that illustrated in Fig. 5.

In Fig. 1 I have illustrated a connecting-rod 18, attached to a staple 19, the staple being secured to the body of the brake near the arm 14, the said rod 18 having an adjustable connection 21 with a hand-lever 20, which lever is capable of movement in a guide 22 at one side of the sleigh-body A.

In Fig. 2 I have illustrated a slight modification in the lever attachment to the extent that a spring-tongue 23 is secured to the rear end of the connecting-rod 18, the said tongue being bifurcated, so that it may readily receive the body of the brake. A wear-plate 24 is usually attached to the runner where the connecting-bar 11^a of the body of the brake engages when the said body is in position to retard a vehicle when it is descending a hill.

When the lever 20 is in an extreme forward position, the brake is applied for descending a hill, as shown in Fig. 3. When the lever occupies a position between the ends of the guide 22, as shown, for example, in Fig. 1, the brake is off or at rest; but when the lever is in its extreme rear position the brake is applied in a manner to prevent the sleigh slipping when ascending a hill, as shown in Fig. 4.

It is obvious that the brake is easy of operation, since the team performs the burden of the work in setting and in releasing the brake.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. A sleigh-brake, consisting of a bifurcated body, the members whereof are adapted for pivotal connection with a support, and an arm projecting from the bow-section of the body, the free ends of the members of the body being provided with diverging projections, as described.

2. A sleigh-brake, consisting of a bifurcated body provided with means for pivotal engagement with a support, a curved arm projected from the connected end of the body, the terminals of the members of the said body being provided each with a horn and a spur curved in opposite directions, the curvature of the horns being the reverse of the curvature of said arm, as described.

3. A sleigh-brake consisting of a bifurcated body provided with means for pivotal engagement with a support, a curved arm projected from the connected end of the body, the terminals of the members of the said body being provided each with a horn and a spur curved in opposite directions, the curvature of the horns being the reverse of the curvature of the said arm, a lever, a connecting-rod adjustably connected with the lever, and a connection between the said rod and the body portion of the said brake, as and for the purpose specified.

4. The combination, with a sleigh-runner and a button pivoted on the said runner, of a brake consisting of a bifurcated body, the members whereof are pivotally attached to opposite sides of the runner forward of the said button, and a curved arm located at the connected end of the body, the free ends of the members of the body being made to terminate in oppositely-curved spurs and horns, the horns having a curvature the reverse of the curvature of the said arm, the brake when not in service, being adapted to rest on said button, for the purpose specified.

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Witnesses:

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