(No Model.)

W. H. GRIFFITHS.

ROLLER SKATE.

No. 329,829. Patented Nov. 3, 1885.

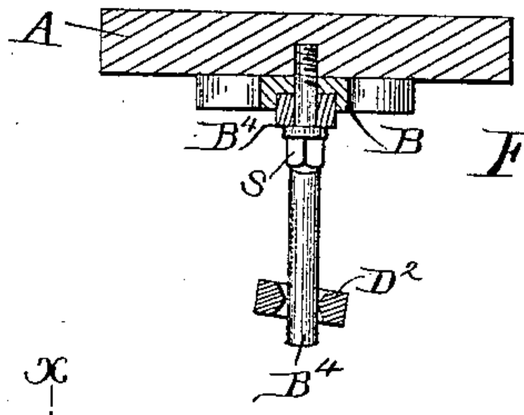

Fig. 3.

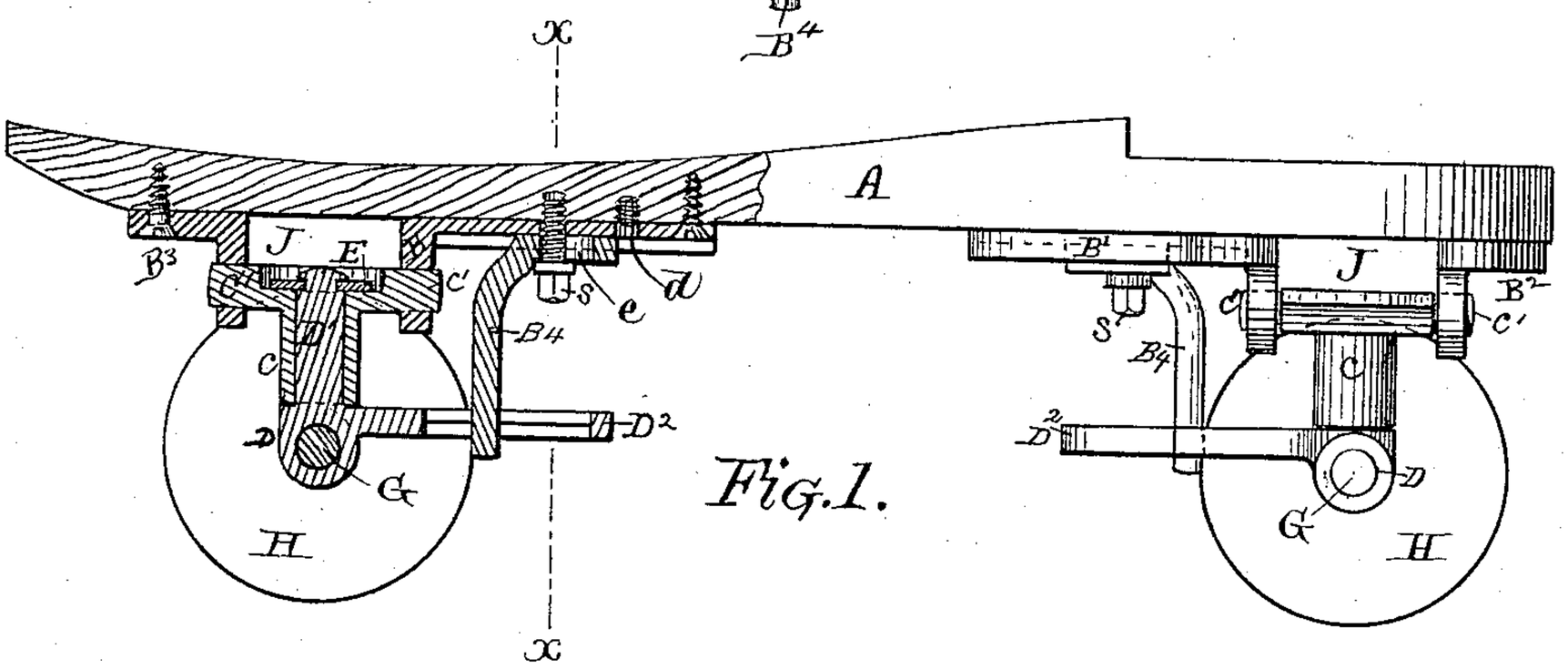

Fig. 1.

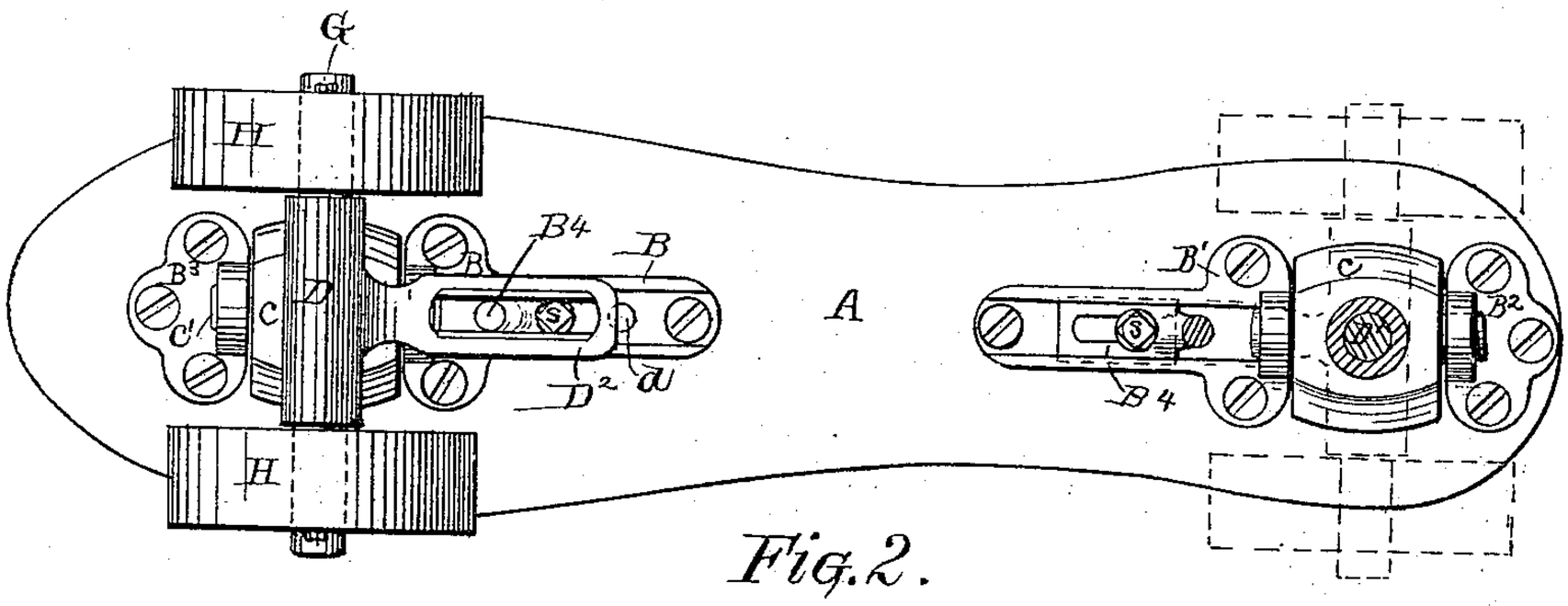

Fig. 2.

Witnesses.

Henry W. Dow

Benj. F. Tripp

Inventor.

William H. Griffiths

UNITED STATES PATENT OFFICE.

WILLIAM H. GRIFFITHS, OF MEDFORD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO HENRY M. DOW, OF SAME PLACE.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 329,829, dated November 3, 1885.

Application filed July 24, 1885. Serial No. 172,524. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GRIFFITHS, of Medford, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Roller-Skates, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claim.

This invention has for its object an improvement in roller-skates; and it consists in the construction and combination of divers devices embodied therein, as is hereinafter more particularly and fully set forth and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a skate embodying my invention, the forward part of the skate being shown in central longitudinal vertical section. Fig. 2 is an inverted or under side plan view of the skate shown in Fig. 1, with the rear rollers and part of the hanger removed. Fig. 3 is a transverse section taken as on line *x x*, Fig. 1, and viewed as from the right in that figure.

In said drawings, A represents the foot-board, to which the other parts are secured, and upon which the user is supported. B, B′, B^2, and B^3 are angle-plates secured to A, as shown. In the depending ears of these plates are pivoted the short sockets or sleeves *c* by their trunnions *c′*, as shown in Figs. 1 and 2, thus allowing sleeves *c* a vibrating or swinging movement transversely to the longitudinal line of the skate. The axles G of rollers H are mounted in sleeves D, which are formed with a stud, D′, that fits loosely in sleeves *c*, and are secured therein by a washer, E, fitted upon the neck of the stud, which is riveted upon the washer. Formed upon and projecting from sleeves D is a slotted arm, D^2, which extends rearward from the front sleeve and forward from the rear sleeve, as shown in Fig. 1. An arm, B^4, which passes through the slot in arm D^2, is secured to the foot-board by a screw, S, that passes through slot *e* in the foot of the arm and through the angle-plates B, as shown, the foot of said arm being fitted to slide in a longitudinal groove in the angle-plate, which serves to hold the arm rigidly in line with the axis of the skate. By means of said slot *e* in the foot of arm B^4 and a supplemental hole, *d*, the arm may be adjusted to engage arm B^4 at any distance from stud D′ within the scope of the slot in D^2, it being obvious that the nearer arm B^4 is to said stud the farther will axles G be vibrated from a right angle to the axis to foot-board A by the same rocking action of the foot-board. In space J, between the foot-board and the broadened part of sleeve *c*, is arranged the usual elastic buffer, which tends to hold sleeve *c′* and stud D′ at right angles to the plane of foot-board A.

By arranging arms D^2 to extend from their respective sleeves toward each other, the front and rear rollers, when said arms are vibrated out of line, will move in a coincident circle, and by the adjustability of arms B^4 toward or from pivots D′ the radius of the circle in which the rollers will move by reason of the same oscillation of the foot-board on trunnions *c′* may be varied as desired.

It will be obvious that, if desired, arms B^4 may be slotted, with arms D^2 formed single to pass through them.

I claim as my invention—

The combination, with the axle-supporting sleeve D, constructed and arranged to vibrate in both a horizontal and vertical plane, and provided with horizontal arm D^2, of the engaging and actuating arm B^4, secured to and depending from the foot-board and made adjustable in the lineal direction thereof to vary its action upon arms D^2, substantially as specified.

WILLIAM H. GRIFFITHS.

Witnesses:

T. W. PORTER,

EUGENE HUMPHREY.