

No. 621,745.

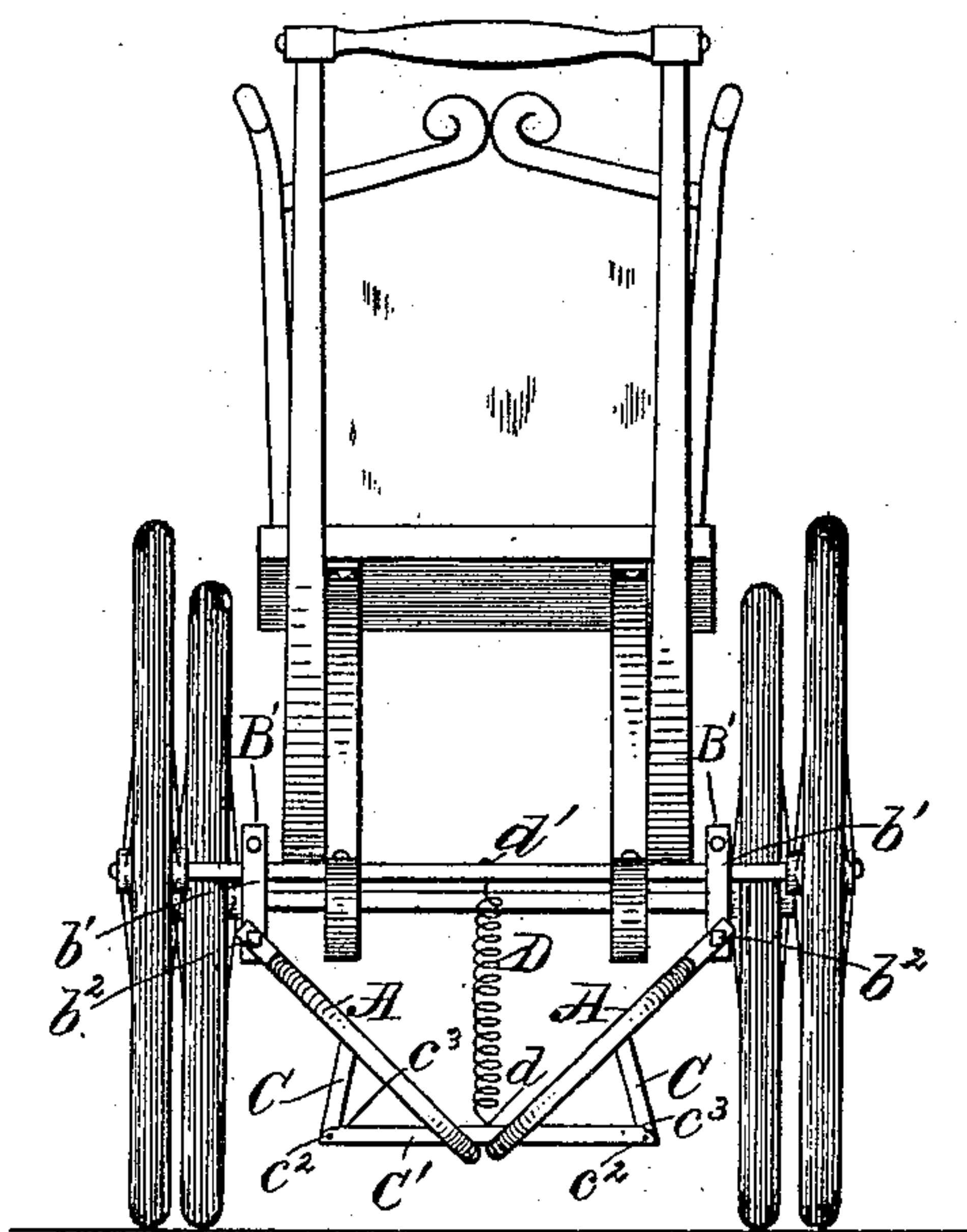
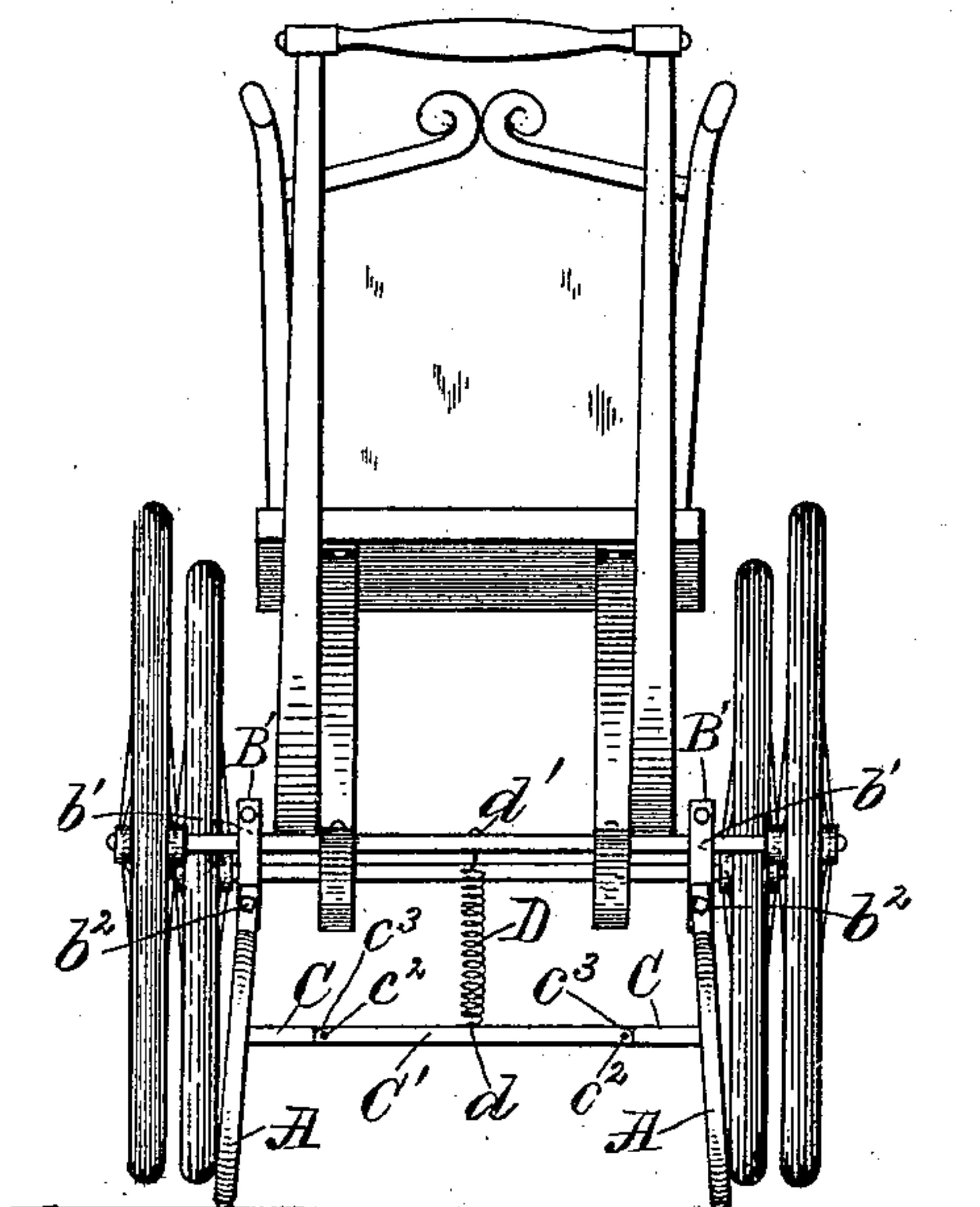
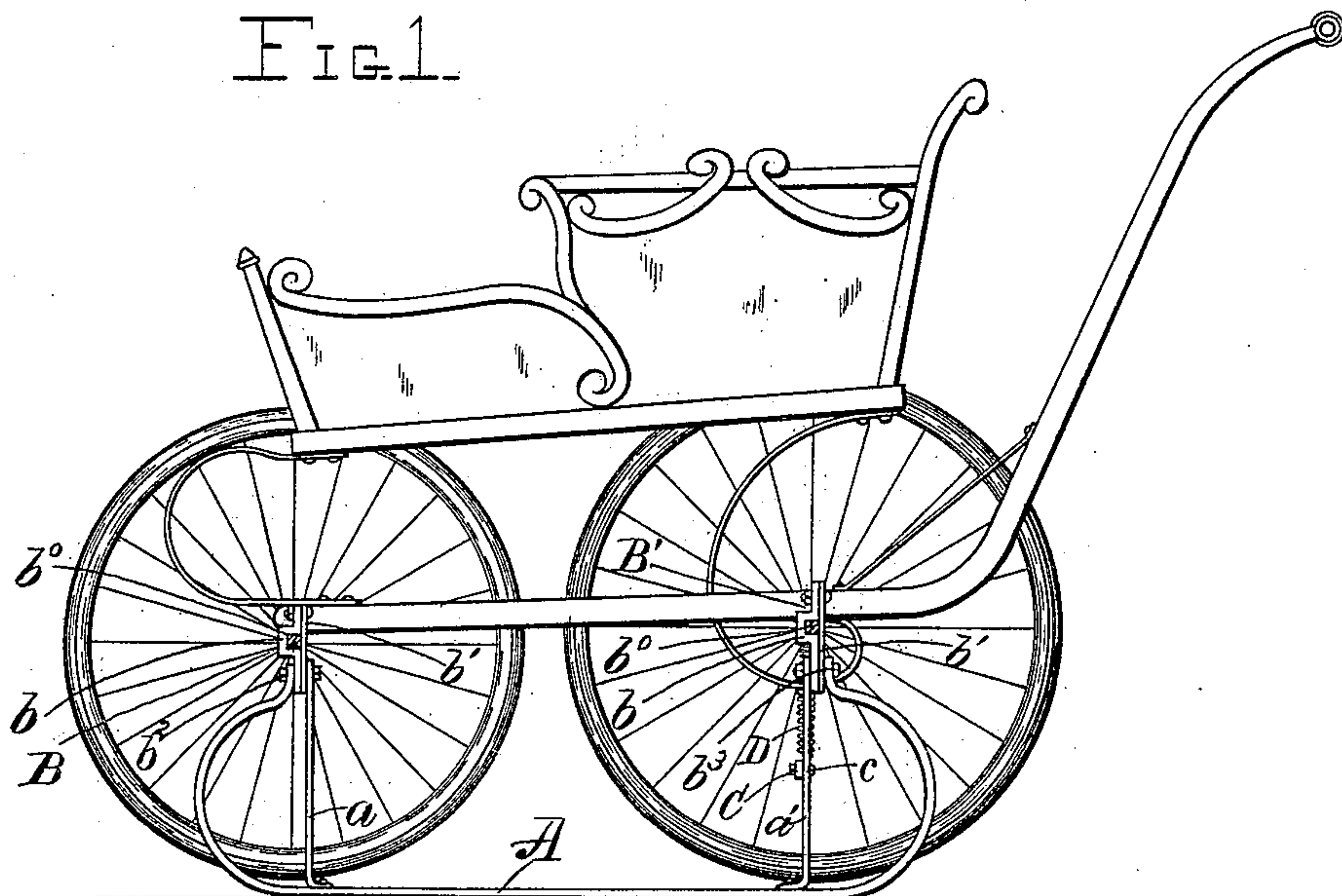
Patented Mar. 21, 1899.

A. J. BOYD.

RUNNER ATTACHMENT FOR WHEELED VEHICLES.

(Application filed Aug. 13, 1898.)

(No Model.)



Witnesses
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FIG. 3. Inventor
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UNITED STATES PATENT OFFICE.

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RUNNER ATTACHMENT FOR WHEELED VEHICLES.

SPECIFICATION forming part of Letters Patent No. 621,745, dated March 21, 1899.

Application filed August 13, 1898. Serial No. 688,515. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. BOYD, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Runner Attachments for Wheeled Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in detachable runners for baby-carriages and similar light vehicles; and it consists in the novel construction and arrangement of parts hereinafter described and claimed.

My invention will be understood by reference to the accompanying drawings, wherein the same parts are indicated by the same letters throughout the several views.

Figure 1 represents a side elevation, partly in section, the wheels upon the nearside being removed, illustrating my runner attachment in position. Fig. 2 represents a rear elevation of a baby-carriage provided with my runner attachment, the latter being adjusted to its position to adapt the carriage for use as a sled; and Fig. 3 represents a rear elevation of the carriage with the runner attachment raised from contact with the ground, as when not in use as a sled.

A A represent the two runners, curved upwardly at each end and secured, by means of bolts, to clips B B' for attachment to the front and rear axles, respectively, of the carriage. Each of these clips is composed of an angular member b , provided with a concavity b^0 , adapted to fit snugly upon the axle of the vehicle, and a straight member b' , which when the clip is applied to the axle is clamped to the angular member B, the two members grasping the axle between them by means of bolts, as shown. These clips are thus held rigidly upon the axles, while the ends of the runners are so held as to admit of a swinging motion thereto upon their points of connection with the said clips $b^2 b^3$, respectively.

Upright braces $a a'$ are preferably provided near the front and rear ends, respectively, of the runners to add rigidity thereto. Preferably connected to the rear upright braces a' , as at c in Fig. 1, are two short arms C C,

the ends of which short arms are pivotally connected by a rod or arm C'.

The joints $c^2 c^2$ upon the short arms C C and the intermediate arm C' are so formed that the said intermediate arm may be depressed and the shorter arms C C may turn upwardly and inwardly with relation to the ends of the said arm C', as seen in Fig. 3; but by reason of shoulders at $c^3 c^3$ upon the ends of the said rod C' the said rod C' may not be moved upwardly beyond a position in line with the said arms C C, as seen in Fig. 2. Thus it will be seen that when the intermediate arm C' is moved with relation to the shorter arms C C to such a position that the three arms are in alinement, as shown in Fig. 2, the runners A A will be forced apart to their fullest extent. In order to hold these jointed arms in this position, I provide as the simplest means a coiled spring D, which is attached at its lower end at d to the center of the arm C' and at its upper end to some convenient portion of the vehicle—such as, for instance, the axle, as shown at d' .

In order to hold the runners in a raised position free from the ground, I utilize the effect of the coiled spring D, as shown in Fig. 3, wherein it will be seen that when the central arm C' has been depressed the short outer arms C C will have turned upwardly and inwardly past a vertical position, so that their upper ends converge, as will be readily seen. The effect of the spring pulling upon the central arm when the outer arms are in this outer converging position has the tendency to hold the said arms in these partially-folded positions, and consequently to hold the runners free from the ground, as shown in Fig. 3, above referred to.

The runners may be lowered by simply grasping the rear end of each with a hand and spreading the same apart, at the same time lifting the carriage slightly.

To elevate the runners, the attendant might simply place one foot upon the central arm, and by depressing the same the short outer arms will be turned upwardly and inwardly, and as soon as these latter pass the vertical positions the force of the spring acting upon the central arm will tend to hold the outer arms in these partially-folded positions, as hereinbefore described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a runner attachment for wheeled vehicles, the combination with clips for rigid attachment upon the axles of the vehicles, and runners having standards pivotally connected to said clips; of a plurality of arms hinged together and the opposite ends of the outer arms being pivotally connected to standards upon the respective runners, the said arms being adapted to fold with respect to each other in but one general direction, and a tension device acting upon said arms constantly in the same direction, substantially as described.

2. In a runner attachment for wheeled vehicles, the combination with clips for rigid attachment upon the axles of the vehicles, runners having standards pivotally connected to said clips; of a pair of relatively short arms pivoted upon standards of the respective runners, an intermediate longer arm to the ends of which said shorter arms are hinged, and with respect to which said shorter arms having a swing in but one direction, form a par-

allel line, and a spring acting upon said intermediate arm constantly in one direction, substantially as described.

3. In a runner attachment for wheeled vehicles, the combination with a pair of runners, and means for detachably connecting the same to the axles of the vehicles; of the relatively shorter arms C C pivotally connected at their outer ends to the runners, the intermediate longer arm C', to which the inner ends of said arms C C are hinged, the said shorter arms C C being capable of turning upwardly from the ends of said intermediate arm C', stops preventing the downward turning of said shorter arms relative to said intermediate arm, and a coiled spring attached to said intermediate arm and to a portion of the vehicle, tending constantly to pull said intermediate arm upwardly, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW J. BOYD.

Witnesses:

JOHN H. HALT,
J. STEPHEN GINSTA.