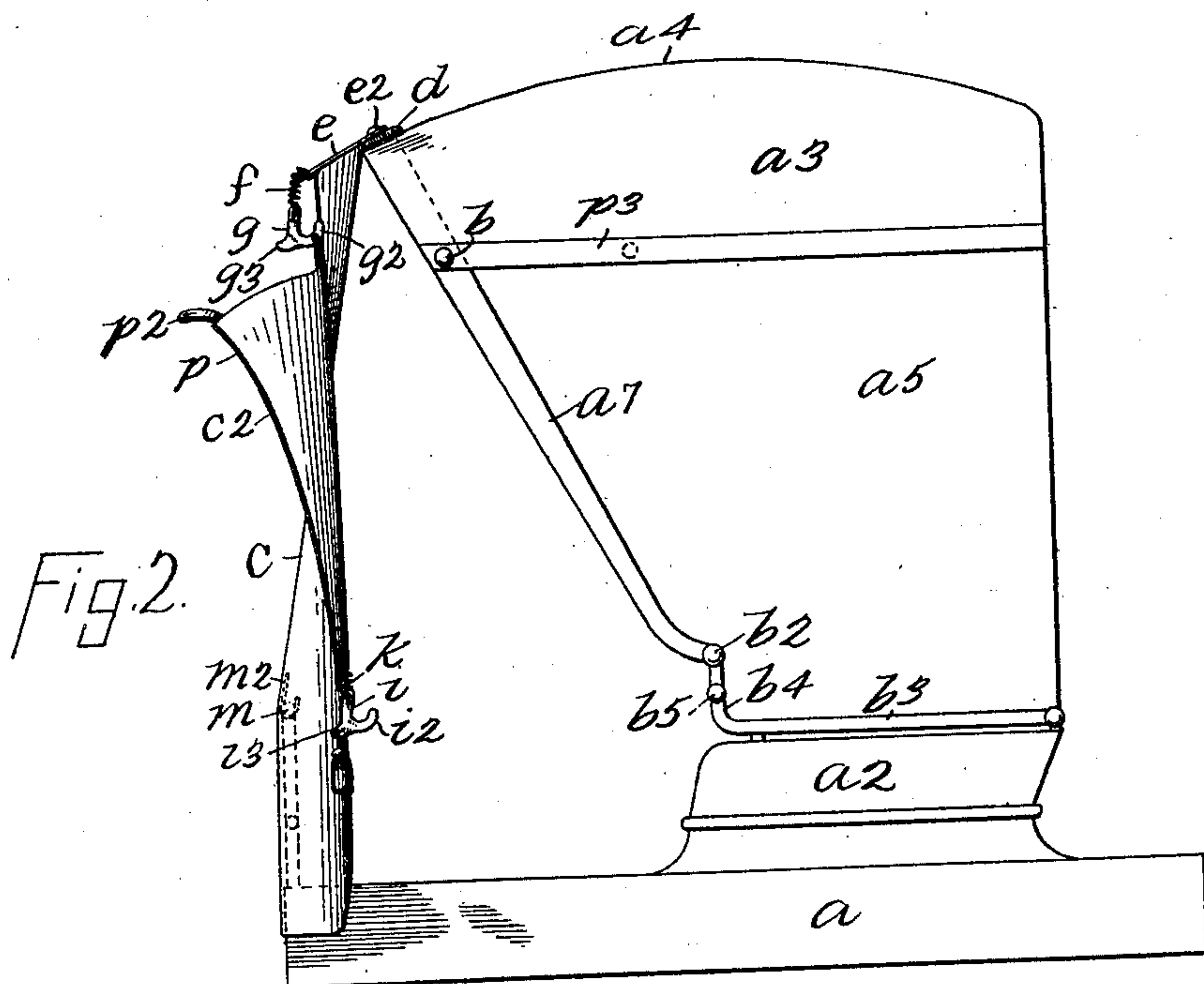
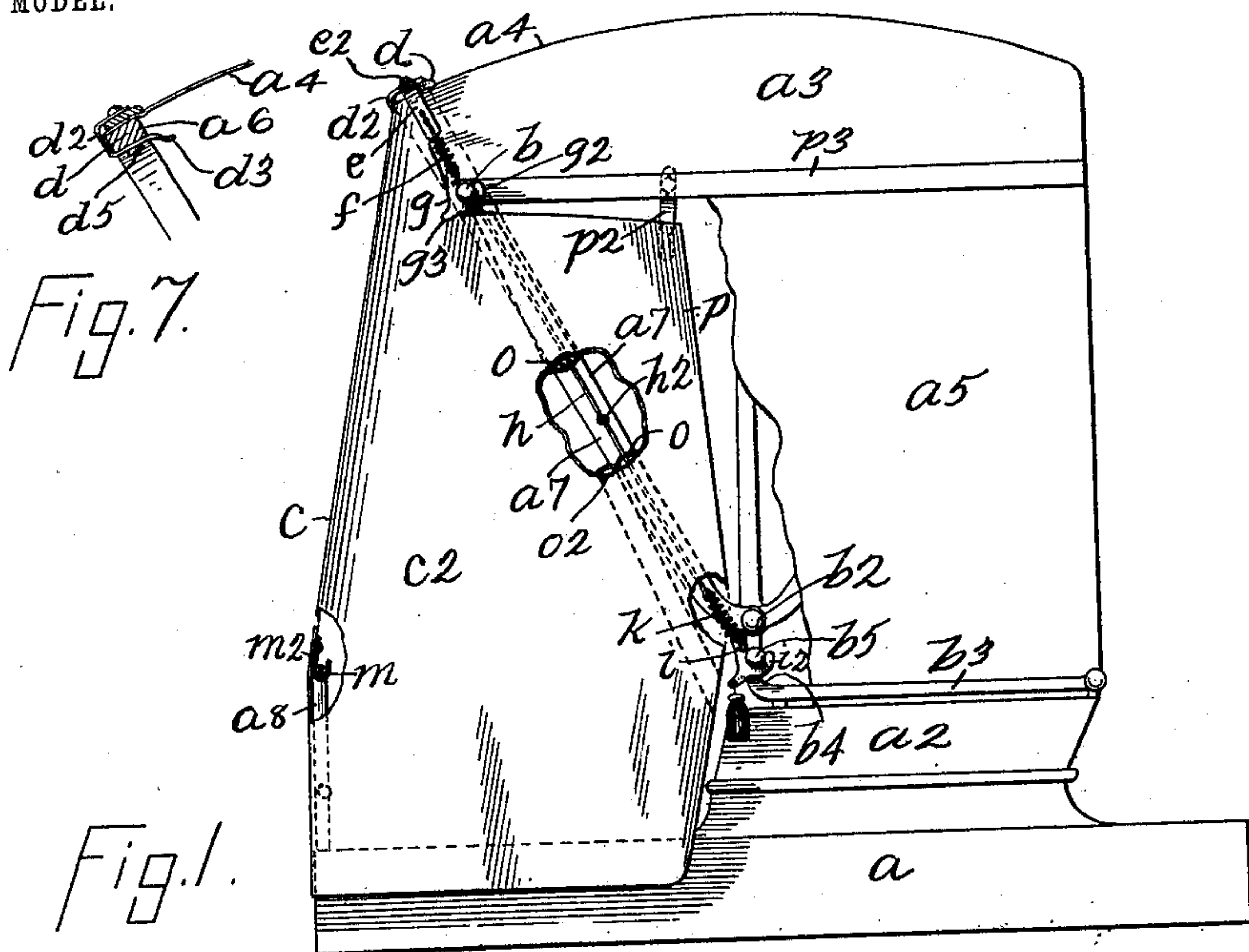


PATENTED MAR. 15, 1904.

APPLICATION FILED APR. 28, 1903. RENEWED FEB. 17, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES

J. C. Larsen
F. A. Stewart

INVENTOR

Bernard S. D. S. Martin

BY

Edgar Tate & Co
ATTORNEYS

ATTORNEYS

No. 754,930.

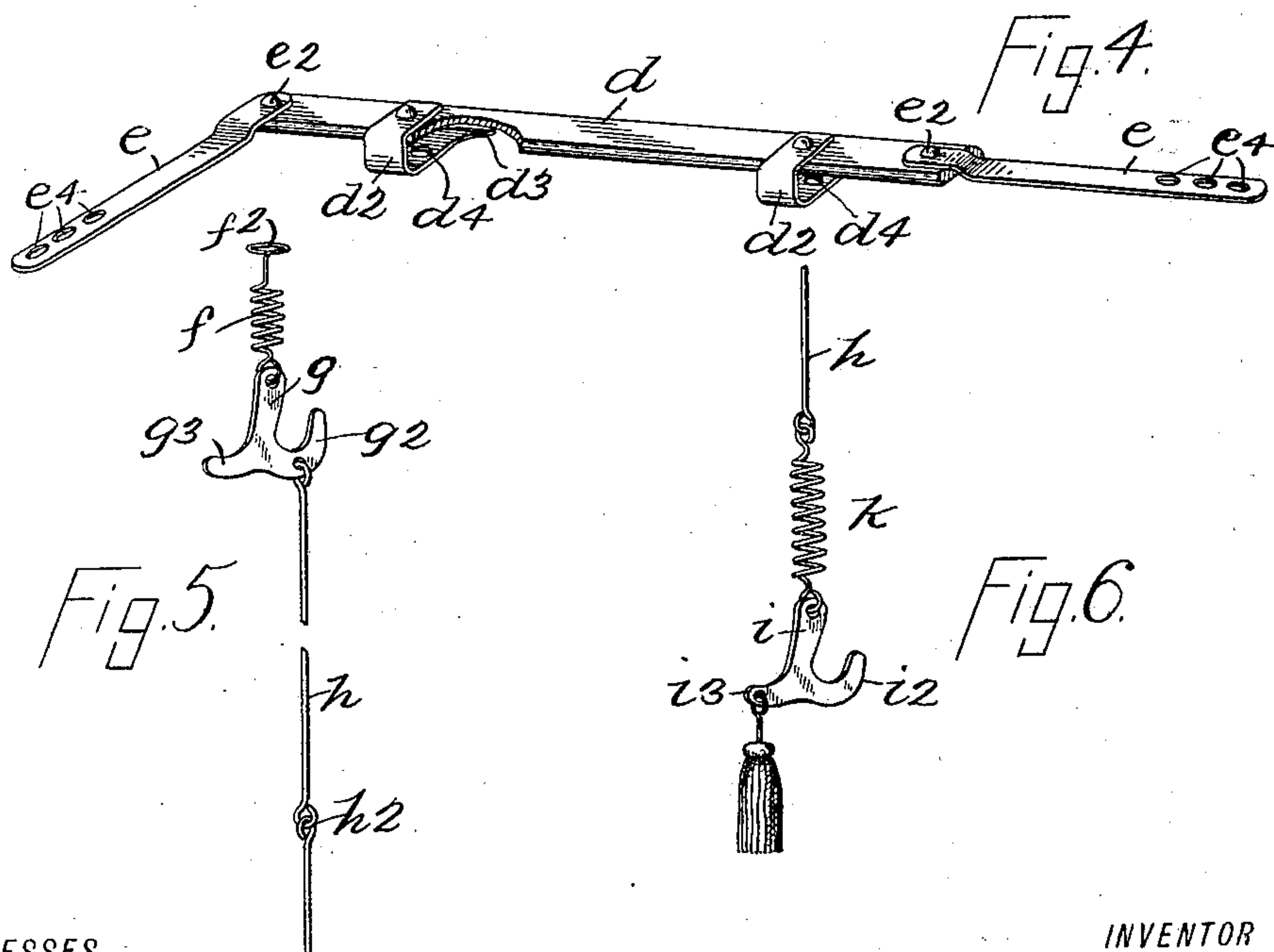
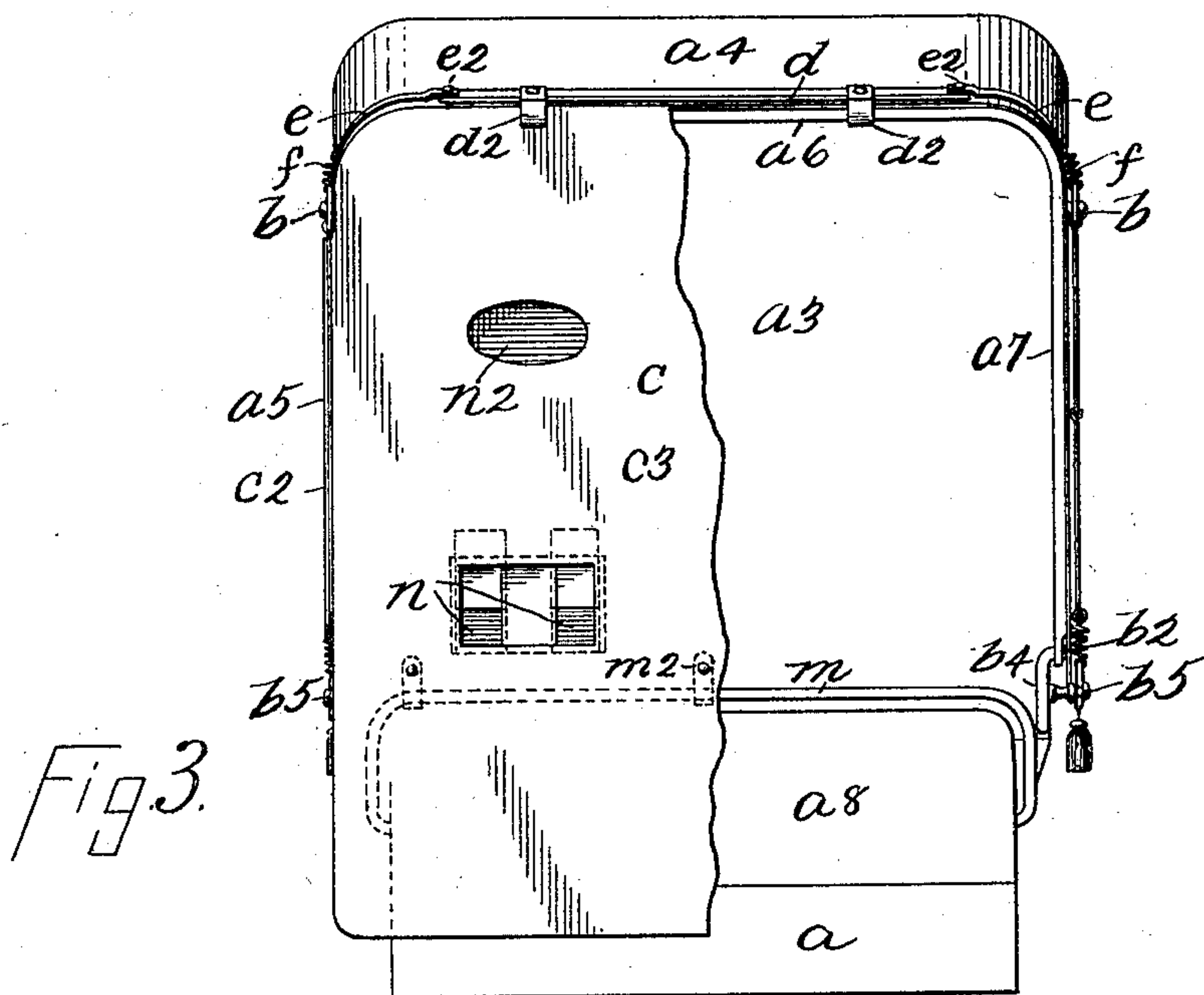
PATENTED MAR. 15, 1904.

B. S. D. S. MARTIN.
STORM CURTAIN FOR VEHICLES.

APPLICATION FILED APR. 28, 1903. RENEWED FEB. 17, 1904.

NO MODEL.

2 SHEETS—SHEET 2.



WITNESSES

J. C. Lassen
F. A. Stuart.

INVENTOR

Bernard S. D. S. Martin

BY

Edgar Sale & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

BERNARD S. D. S. MARTIN, OF McPHERSON, KANSAS.

STORM-CURTAIN FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 754,930, dated March 15, 1904.

Application filed April 28, 1903. Renewed February 17, 1904. Serial No. 194,079. (No model.)

To all whom it may concern:

Be it known that I, BERNARD S. D. S. MARTIN, a subject of the King of Great Britain, residing at McPherson, in the county of McPherson and State of Kansas, have invented certain new and useful Improvements in Storm-Curtains for Vehicles, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to storm-curtains for buggies and similar vehicles, and particularly the means for connecting the curtain or curtains with the buggy or other vehicle; and the object thereof is to provide an improved storm-curtain frame or holder for the purpose specified which may be conveniently attached to the hood of a buggy or other vehicle and easily removed therefrom and folded together, so as to be placed beneath the seat of the buggy or other vehicle or in any suitable receptacle.

In the drawings forming part of this specification I have shown my improvement applied to the buggy-body having the usual top or hood portion, the running-gear and wheels being omitted, and the invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a side view of the top portion of a buggy provided with my improvement and showing a storm-curtain in position, part of one side of the buggy-hood being broken away and part also of the storm-curtain being broken away, so as to better show the construction; Fig. 2, a similar view showing one side of the curtain detached from the buggy-hood; Fig. 3, a front view showing part only of the storm-curtain in position; Fig. 4, a perspective view of part of the curtain frame or holder; Fig. 5, a similar view of another part thereof; Fig. 6, a similar view of another part thereof, and Fig. 7 a cross-section of the front top portion of the buggy-hood frame and showing the means I employ for connecting a part of the storm-curtain frame or holder therewith.

In the drawings forming part of this specification I have shown at *a* an ordinary buggy-

body provided with the usual seat portion *a*² and hood portion *a*³, which comprises the usual frame, and top cover *a*⁴ and side curtains *a*⁵, and the front top bow of the hood-frame is shown at *a*⁶ in Figs. 3 and 7, and the front side-bars of the hood-frame are shown at *a*⁷ in Figs. 1, 2 and 3, and the buggy-hood is provided at the top of the side-bars *a*⁷ with the usual knobs *b* and at the bottom thereof with the usual knobs *b*², at which point all the side-bars of the frame of the buggy-hood are pivoted, including the bars *a*⁷, and around the seat portion *a*² and slightly above the same is secured a rod *b*³, having upwardly-directed side members *b*⁴, to which the side-bars of the buggy-hood frame are pivoted by means of the shank of the knob *b*², and below this knob *b*² is another knob *b*⁵. All these parts of the buggy-body *a* and the hood thereof may be of the usual or any preferred construction, and it will be understood that the hood may fold backwardly in the usual manner. I have also shown at *c* a storm-curtain, and this storm-curtain may consist of one, two, or three parts and comprises side portions *c*² and a central portion *c*³, and in the practice of my invention I provide a strip or bar *d*, which in the form of construction shown is placed directly over the yoke *a*⁶ of the buggy-hood frame and connected therewith by clips *d*², which are secured thereto and are provided with downwardly and backwardly curved members *d*³, having holes *d*⁴, through which they may be connected with the yoke *a*⁶ by means of buttons *d*⁵, as shown in Fig. 7, or in any desired manner. At the opposite ends of the strip or bar *d* are spring members *e*, which are pivoted thereto at *e*² and which are so formed as to be bent to conform to the curve of the hood at the opposite sides thereof, and these spring members *e* are provided with longitudinally-arranged holes *e*⁴, and I also provide two spiral springs *f*, one for each of the spring members *e*, and these spiral springs *f* are provided at one end with a link-shaped member or head *f*², and said springs *f* are connected with the spring members *e* by passing the link-shaped members or heads through the holes *e*⁴. Connected with the other or lower ends of the springs *f* is a hook member

g, having a hook g^2 and a finger or handle portion g^3 , and the hooks g^2 of the hook members g are adapted to engage the knobs b or the shanks thereof at the opposite sides of the top portion of the buggy-hood.

Connected with hook members g are side rods h , composed of two parts connected at h^2 , and these rods are each provided at the lower end thereof with another hook member i , having a hook i^2 and a finger or handle portion i^3 , and the hooks i^2 of the hook members i are adapted to engage the knobs b^5 , or they may be connected with the knobs b^2 , as may be desired. The hook members i are connected with the rods h by means of spiral springs k , and the object of providing a plurality of the holes e^4 in the spring members e is to provide means whereby the length of the rods h may be adjusted so as to correspond with buggy-hoods of different heights, and the springs f and k are so formed that they may be stretched so as to allow the hook members g^2 and i^2 to engage the knobs b and b^5 and also hold said hooks in such engagement.

Around the dashboard a^8 of the buggy body or top is a rod m , and the storm-curtain c is provided with hooks m^2 , which are adapted to be connected therewith.

As thus constructed it will be seen that the storm-curtain frame or holder may be taken off and folded up together, and the curtain may also be folded around the curtain or holder, and the entire apparatus may be placed beneath the buggy-seat or in any suitable receptacle, and my invention is not limited to the placing of the strip or bar d on the outer upper portion of the yoke a^6 , and the same may be placed on the inner or under portion of this yoke, if desired, and in this event the spring members e would also be placed inside of the hood portion of the buggy or other vehicle, and the hook members g in this case will be made longer and bent outwardly across the upper ends of the bars a^7 or the end portions of the yoke a^6 , so as to engage the knobs b , and other changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

The storm-curtain c is also provided in the usual manner with openings n , through which the reins are passed, and with an eye-opening n^2 , by which the driver may see what is going on in front when the storm-curtain is in use.

It is not absolutely essential that the side rods h be made of two members; but I prefer this construction in order that the frame or holder for the storm-curtain may be more compactly folded together.

In connecting the storm-curtain with the side rods h I preferably form pockets or hems o in the storm-curtain, through which said rods are passed, and the curtain may be connected with the strip or bar a in any desired manner, and in practice I also prefer to form

supplemental pockets or hems o^2 below the pockets or hems o , through which the rods h may be passed when it is desired to draw a storm-curtain or the sides thereof tighter, and the side portions of the storm-curtain are also provided at the top with extensions p , forming flaps provided with fastening devices p^2 , which may be connected with the horizontal frame members p^3 at the opposite sides of the top portion of the buggy-hood; but these details of construction in the connection of a storm-curtain with the frame or support thereof and with the hood of the buggy may be varied or modified as desired.

Instead of making the bar d of one part, as herein shown and described, it may be made of two parts to adapt the device for use in connection with curtains composed of two parts, and the said two parts of the bar may be detachably connected in any desired manner, so as to allow of folding when the curtain is made of one part. By connecting the spring members e with the bar d , as herein shown and described, and providing the hook members g , which are detachably connected with the knobs b , I also provide means whereby one of said hook members may be detached so as to allow the corresponding spring members e to spring forwardly, so as to admit of entrance to or exit from the vehicle. It is not absolutely essential that the springs k should be placed as shown, as said springs may be placed at any point in the side rods h , and these springs serve to adapt the device to buggy or other vehicle tops of different heights and also to facilitate the operation of attaching the apparatus to the top of a vehicle.

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

1. A storm-curtain frame or holder for buggies and other vehicles adapted to be connected with the hood thereof and comprising a top plate or strip adapted to be detachably connected with the top front portion of the hood-frame, spring members pivotally connected with the opposite ends thereof, spiral springs connected with said spring members, hook members connected with said spiral springs and adapted to engage the knobs at the opposite sides of the top portion of the hood-frame, side-rod members connected with said hook members spiral springs in the side-rod members and other hook members connected with said side-rod members and adapted to engage knobs at the bottom side portions of the hood-frame, substantially as shown and described.

2. A storm-curtain frame or holder for buggies and other vehicles adapted to be connected with the hood thereof and comprising a top plate or strip adapted to be detachably connected with the top front portion of the hood-frame, spring members pivotally connected with the opposite ends thereof, spiral springs connected with said spring members, hook

members connected with said spiral springs and adapted to engage the knobs at the opposite sides of the top portion of the hood-frame, side-rod members connected with said hook members, spiral springs connected with the lower ends of said side-rod members and other hook members connected with said springs and adapted to engage knobs at the bottom side portions of the hood-frame, substantially as shown and described.

3. A storm-curtain frame or holder for buggies and other vehicles adapted to be connected with the hood thereof and comprising a top plate or strip adapted to be detachably connected with the top front portion of the hood-frame, spring members pivotally connected with the opposite ends thereof, spiral springs connected with said spring members, hook members connected with said spiral springs and adapted to engage the knobs at the opposite sides of the top portion of the hood-frame, side rods connected with said hook members, spiral springs connected with the lower ends of said side rods, and other hook members connected with said springs and adapted to engage knobs at the bottom side portions of the hood-frame, the lengths of said rods being adjustable, and a storm-curtain detachably connected with said storm-curtain frame or holder, substantially as shown and described.

4. A storm-curtain frame or holder for buggies or other vehicles comprising a top strip or bar adapted to be detachably connected with the top portion of the hood-frame of the vehicle, side rods composed of separate members and connected with the opposite ends of said strip or bar by spring devices, hooks connected with said spring devices and adapted to engage knobs at the opposite sides of the top portion of the hood-frame, and other hook devices connected with the lower ends of said rods and adapted to engage knobs at the bottom of the opposite side portions of the hood-frame, substantially as shown and described.

5. A storm-curtain frame or holder for vehicles comprising a top and side portions the lengths of the side portion being adjustable and said side portions being also provided at the top and bottom thereof with spring-hooks adapted to engage knobs at the top and bottom of the sides of the hood of the vehicle, substantially as shown and described.

6. A storm-curtain frame or holder for vehicles, said frame or holder being provided with spring-hooks adapted to engage knobs or burs at the top and bottom of the sides of the hood of the vehicle, substantially as shown and described.

7. A storm-curtain frame or holder for vehicles, comprising a top and side portions, the side portions being adjustable in length, substantially as shown and described.

8. A storm-curtain frame or holder for vehicles adapted to be detachably connected with the hood of the vehicle and provided with a storm-curtain the side members of which are provided with backwardly-directed flaps which extend backwardly of the front side portions of the hood, substantially as shown and described.

9. A storm-curtain frame or holder for vehicles adapted to be detachably connected with the hood of the vehicle, and a storm-curtain detachably connected with said frame or holder, said curtain being provided at the side with flaps which extend backwardly of the front side portions of the hood, substantially as shown and described.

10. A storm-curtain frame or holder for vehicles adapted to be detachably connected with the hood of the vehicle, and a storm-curtain detachably connected with said frame or holder, said curtain being provided at the side with flaps which extend backwardly of the front side portions of the hood, and the side portions of the curtain being also provided with a plurality of pockets through which the side portions of the frame or holder may be passed, substantially as shown and described.

11. The combination with a detachable frame or holder for the storm-curtain of a vehicle, of a storm-curtain provided at the sides thereof with a plurality of pockets arranged side by side and adapted to receive the side members of the frame or holder whereby the curtain may be adjusted, substantially as shown and described.

12. The combination with a detachable frame or holder for the storm-curtain of a vehicle, of a storm-curtain provided at the sides thereof with a plurality of pockets arranged side by side and adapted to receive the side members of the frame or holder whereby the curtain may be adjusted, the sides of the curtain being also provided with extensions or flaps which extend backwardly of the front side portions of the hood, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 15th day of March, 1903.

BERNARD S. D. S. MARTIN.

Witnesses:

DOUGLAS M. HALE,
ROY D. DAVIS.