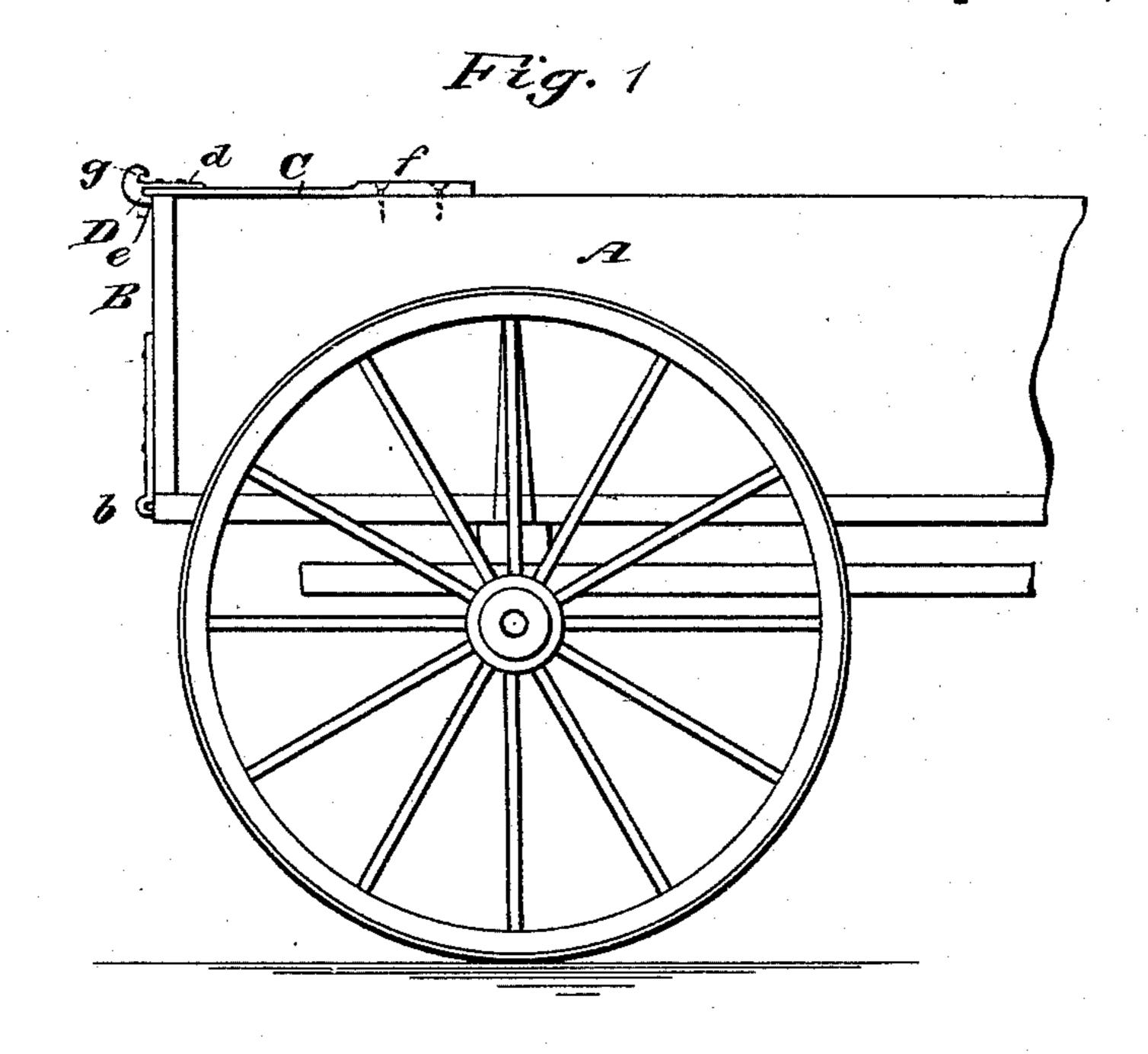
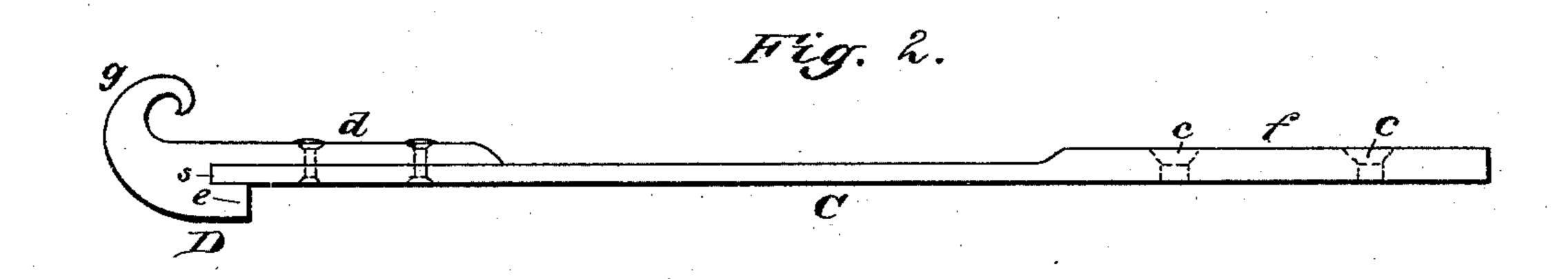
(No Model.)

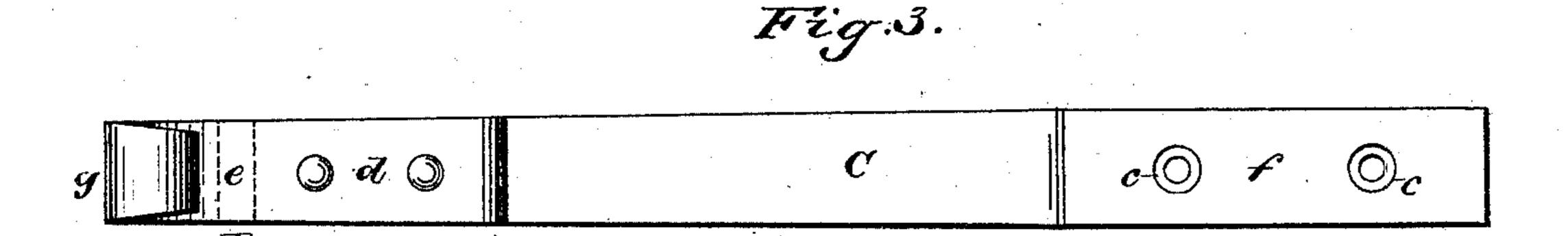
## F. NICKERSON, Jr. TAIL BOARD SPRING.

No. 473,774.

Patented Apr. 26, 1892.









INVENTOR:

F. Mickerson fr

BY

Munn +6

ATTORNEYS

## UNITED STATES PATENT OFFICE.

FREEMAN NICKERSON, JR., OF FALL RIVER, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND HENRY MCCLUSKY, OF SAME PLACE.

## TAIL-BOARD SPRING.

SPECIFICATION forming part of Letters Patent No. 473,774, dated April 26, 1892.

Application filed January 15, 1892. Serial No. 418,170. (No model.)

To all whom it may concern:

Be it known that I, FREEMAN NICKERSON, Jr., of Fall River, in the county of Bristol and State of Massachusetts, have invented a 5 new and useful Improvement in Tail-Board-Vehicle Springs, of which the following is a full, clear, and exact description.

My invention is applicable to all kinds of wagons or vehicles provided with tail-boards ro of different kinds. Its purpose is the same as that of other tail-board springs-namely, for keeping the tail-board of the vehicle closed when shut and of readily admitting of the opening or dropping of the tail-board when 15 required to load or unload the vehicle.

The invention consists in the novel construction of such a spring, substantially as hereinafter described, and more particularly pointed out in the claim; and the object of 20 it is to produce a simple spring of this description which shall be cheaper and stronger where the same is liable to break than the ordinary tail-board spring in use.

Reference is to be had to the accompanying 25 drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a side elevation of a tail-board wagon in part with my improved 30 spring applied thereto. Fig. 2 is a side view, upon a larger scale, of said spring detached; Fig. 3, a top view thereof, and Fig. 4 a view in perspective of the catch portion of the spring detached from the main body thereof.

A indicates the body of a tail-board wagon in part, and B its tail-board hinged below, as at b, to open and close, as required.

Applied to either or both sides of the wagon-body at the top are the springs, one of 40 which only is here shown, for holding the tailboard closed and for admitting of it being let down or opened when needed. The spring ordinarily used for this purpose is made of one piece of metal and constructed at its free 45 end to engage with the opening or upper porbody and catching portion of the spring of one piece of metal is very expensive and the spring is very liable to break where its great 50 strain comes.

My improved spring is made of two parts or pieces—namely, of a body C and an inde-

pendent catch D. The body C is cut from sheet-steel and preferably strengthened by giving it an increased thickness at its one or 55 fulcrum end f, where it may be provided with holes c for the passage of screws to secure it to the wagon-body. The catch D is made of malleable iron, riveted, cast, or otherwise firmly secured to the steel body C of the spring. 60 It can be chilled or hardened, as desired, and is constructed of strap form, with a long upper leaf d, made to reinforce the outer surface of the free portion of the body C of the spring for a considerable portion of its length, 65 and with a lip e beneath, forming, in connection with the leaf part d, a notch s to receive within or between them the extreme free end of the body C of the spring. The lip e constitutes the locking part of the catch over the 70 opening and closing upper portion of the tailboard B. The catch D is made very solid or strong where it projects beyond the free end of the spring-body C and is of a roll or hook shape above, as at g, to form a ready handle 75 for lifting the spring when required to disengage it from the tail-board D.

Such a combined spring and catch constructed of two pieces of metal can not only be made very much cheaper than the ordi- 80 nary tail-board spring of one and the same piece of metal, but the construction of the catch part as described stiffens the spring and prevents it breaking where most exposed to strain.

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

A spring for the tail-boards of vehicles, consisting of the body part C, formed of one 90 piece of spring metal, and the catch part D, composed of another piece of metal firmly secured to the body part and constructed with an elongated outer or upper leaf d and with a lip e, forming, with the leaf, a notch s to re- 95 ceive the outer end of the spring-body, said lip also forming the locking part of the spring tion of the tail-board. Thus making the main | for the tail-board of the vehicle, essentially as shown and described.

FREEMAN NICKERSON, JR.

Witnesses:

SANDY HARRISON, HENRY McClusky.