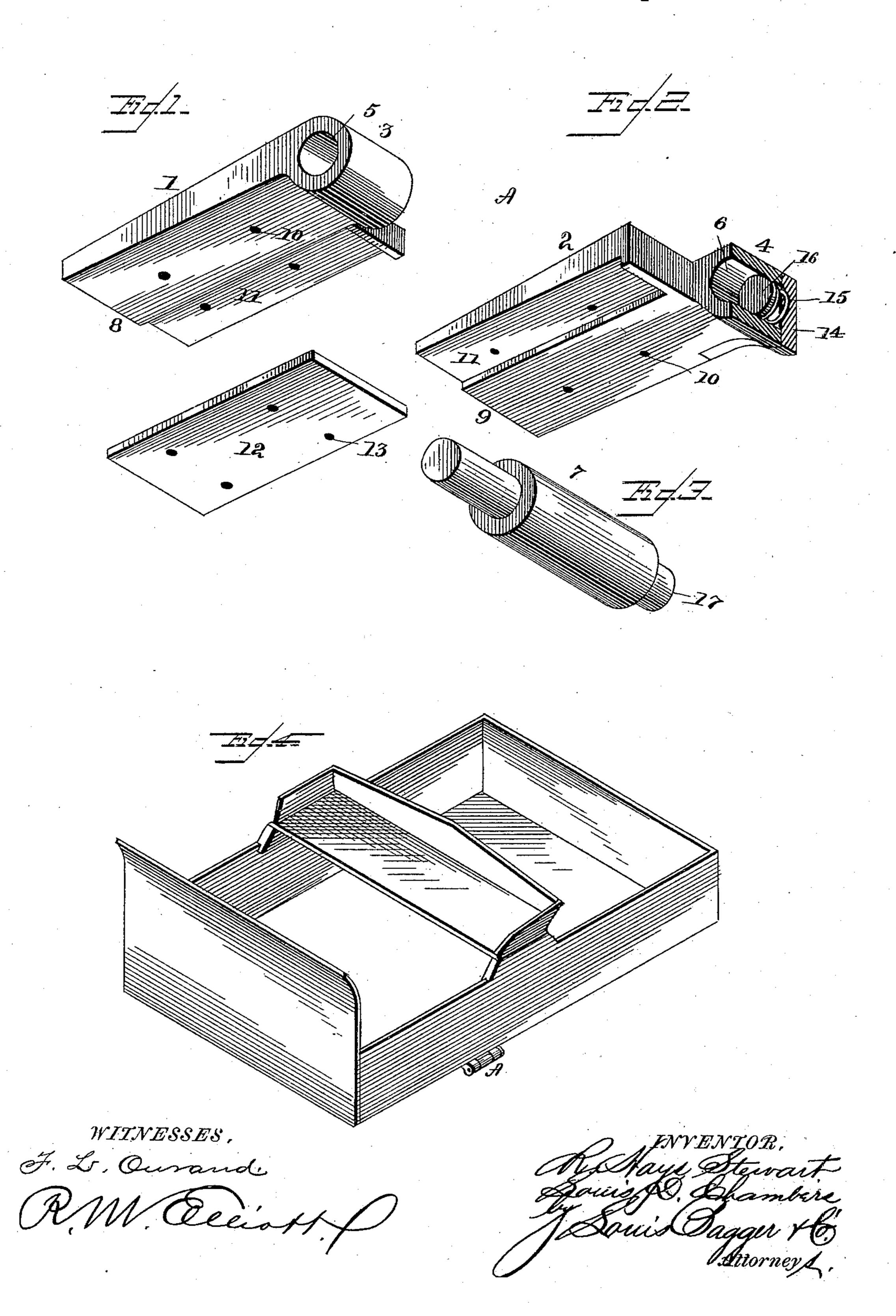
(No Model.)

## R. H. STEWART & L. D. CHAMBERS. STOP PLATE FOR BUGGIES.

No. 401,602.

Patented Apr. 16, 1889.



## United States Patent Office.

R. HAYS STEWART AND LOUIS D. CHAMBERS, OF ISLAND, PENNSYLVANIA.

## STOP-PLATE FOR BUGGIES.

SPECIFICATION forming part of Letters Patent No. 401,602, dated April 16, 1889.

Application filed December 8, 1888. Serial No. 293,042. (No model.)

To all whom it may concern:

Be it known that we, R. Hays Stewart and Louis D. Chambers, both residents of Island, in the county of Clinton and State of 5 Pennsylvania, have invented certain new and useful Improvements in Stop-Plates for Buggies; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others 10 skilled in the art to which it appertains to make and use the same.

This invention relates to stop-plates for wagons, buggies, and the like; and it consists in the construction and novel combination of 15 parts, as hereinafter fully described and claimed.

In the accompanying drawings, forming part of this specification, and in which like letters of reference indicate corresponding 20 parts, Figure 1 is a perspective view of one of the plates in which the roller is mounted, showing a shoulder formed on one end of the same and provided with an opening in which the axle of the roller works. Fig. 2 is a per-25 spective view of the other plate, partly in section, showing a spring and washer mounted in one end, against which the roller bears to prevent the same from rattling. Fig. 3 is a detail view of the roller, and Fig. 4 is a perspective 30 view showing the device secured to the body of a buggy.

Referring to the drawings, A designates the stop-plate, consisting of two arms, 1 and 2, one portion of which is formed into shoulders 35 3 and 4, provided with openings 5 and 6, which form bearings for the roller 7. The rear portions of these plates are formed into arms 8 and 9 and are provided with openings 10, through which the screws or bolts pass to se-40 cure it to the bottom of a wagon or buggy. The inner edges of each of these arms are cut away to form a recess, 11, in which fits another plate, 12, provided with a number of openings, 13, through which screws are in-45 serted and are screwed into the recessed portion of the arm, the plate 12 being equal in thickness to the depth of the recess, so that when the device is intact the plate presents

a smooth and regular surface. To the outer side of the shoulder 4 is secured a plate, 14, 50 designed to close the opening in the said shoulder; or, if desired, the shoulder may be made closed at the end. Within the opening 6 of the said shoulder is placed a coiled spring, 15, which rests against the plate 14, 55 and on the top of this spring is placed a washer, 16, the said washer being designed to press against the end 17 of the axle of the roller 7, so that when the vehicle using this device is running the roller will be prevented 60

from rattling.

Having now described the different parts of this device, we will proceed to show the manner in which it is put together and secured to a buggy, wagon, or other vehicle. 65 The roller is first inserted in the opening in the shoulder 3, and the other arm, having the spring and washer secured in the shoulder, is then placed in position on the opposite axle. The plate 12 is then placed in position, and is 70 secured by means of screws, as before described. The device is attached to the under side of a buggy or wagon by means of bolts engaging the openings 8 in the arms. Thus when it is placed upon a buggy or wagon the 75 only portion which will be seen is the roller and shoulders.

We will have it understood that we do not confine ourselves to the roller having the axle made integral therewith, but may use a 80 rod having a piece of pipe slipped on it for the same purpose. We may also construct the arms of either brass or iron or any other suitable metal, and in one piece, instead of two pieces, as now shown.

Now, it will be seen readily that should the vehicle using this device be turned sharply around, instead of the tire grinding against the stop-plate, as is ordinarily the case, it will simply cause the roller 7 to revolve, and 90 thus prevent any unpleasant noise and undue wear of the tire.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with the recessed arm 1,

having a shoulder and an open bearing on the same end, and the roller 7, provided with shouldered ends, of the recessed arm 2, provided with the shoulder 4, having its opening 5 provided with an internally-disposed springpressed washer bearing against the end 17 of the roller 7, substantially as specified.

In testimony that we claim the foregoing as |

our own we have hereunto affixed our signatures in presence of two witnesses.

R. HAYS STEWART.

LOUIS D. CHAMBERS.

 $\operatorname{Witnesses}$ :

Joseph Grafius, S. N. McCormick, M. H. O'DONNELL.