

(No Model.)

W. B. SIMPSON.  
WAGON SPRING.

No. 598,024.

Patented Jan. 25, 1898.

Fig. 1.

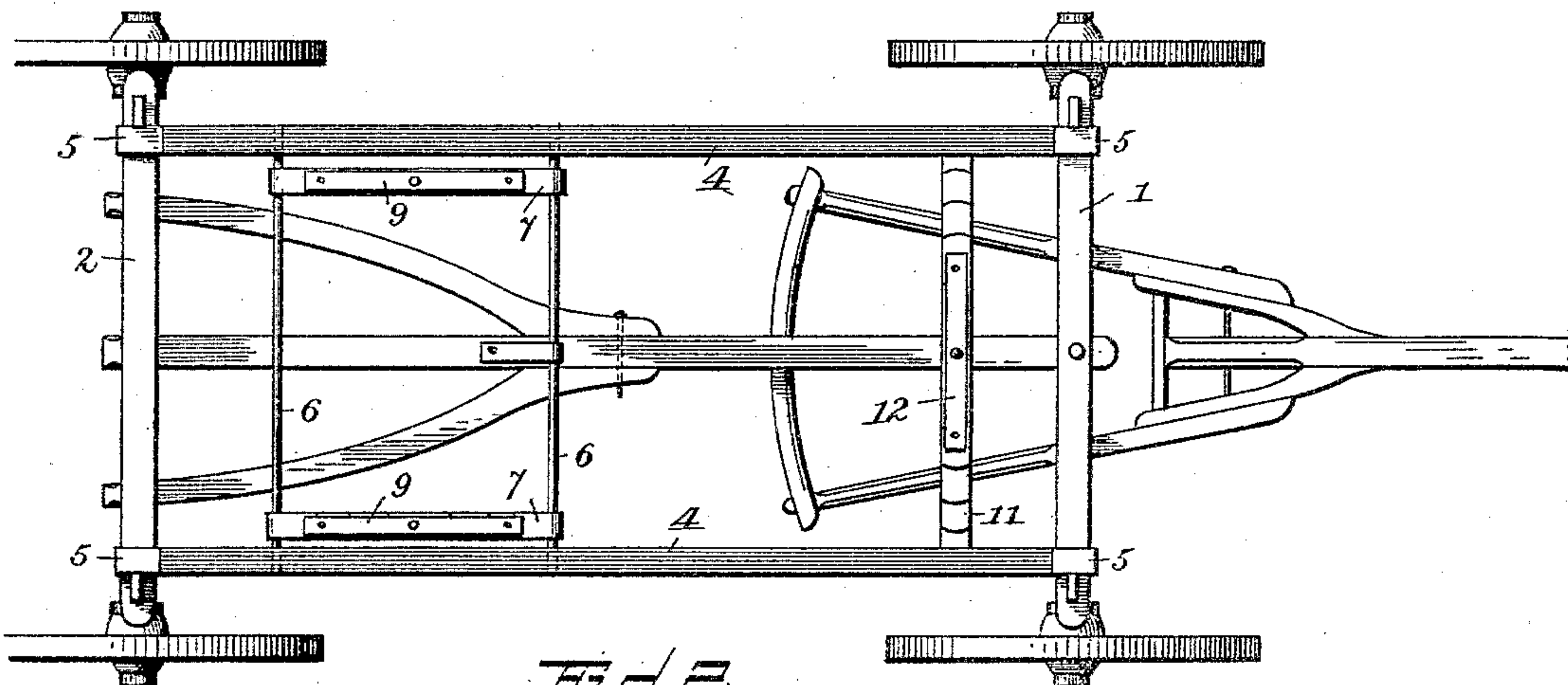


Fig. 2.

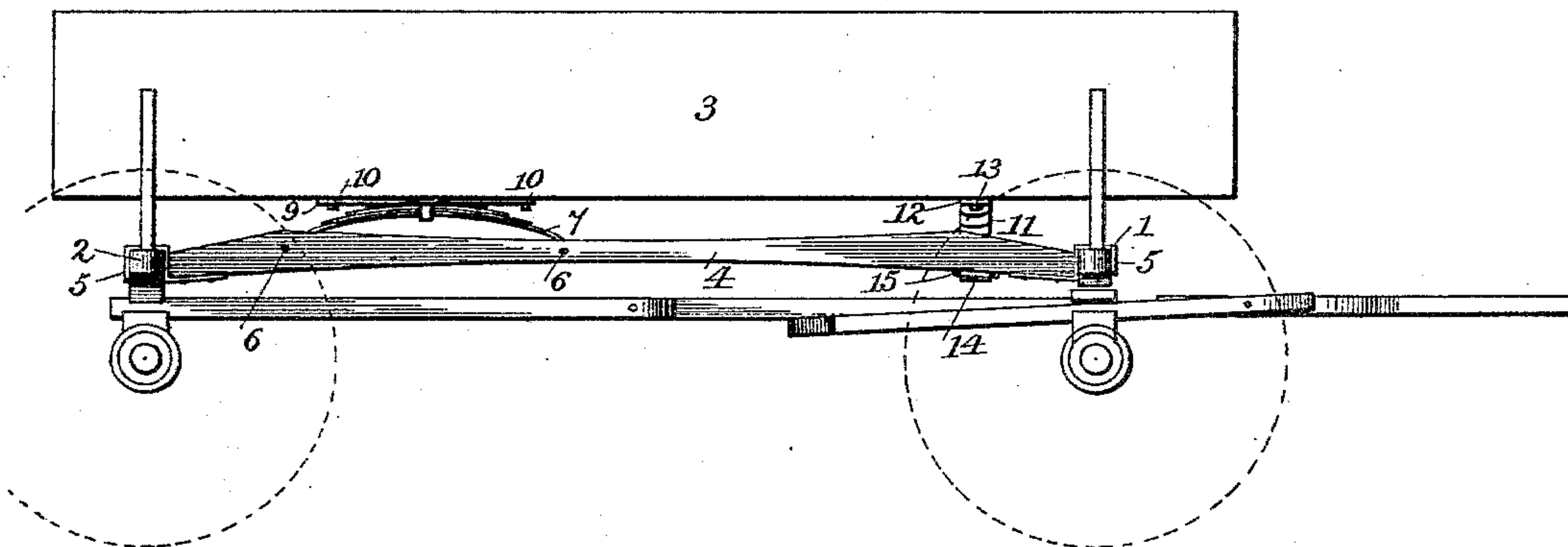
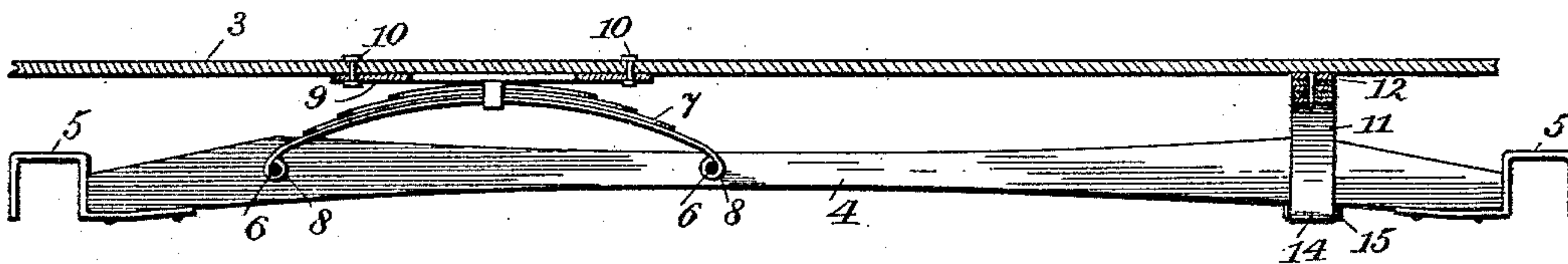


Fig. 3.



Inventor

Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM BUTLER SIMPSON, OF BENTON, LOUISIANA.

## WAGON-SPRING.

SPECIFICATION forming part of Letters Patent No. 598,024, dated January 25, 1898.

Application filed March 10, 1897. Serial No. 626,867. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM BUTLER SIMPSON, a citizen of the United States, residing at Benton, in the parish of Bossier and State of Louisiana, have invented a new and useful Spring Attachment for Wagons, of which the following is a specification.

This invention relates to detachable and portable spring attachments for wagons, adapted to be removably supported on the bolsters of the vehicle and to be detachably connected to the body of the vehicle, the object being to provide an attachment of this character which may be interposed between the body and the running-gear of a vehicle and removed therefrom as occasion may demand.

With this object in view the invention consists in the several details of construction and combination of parts hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a plan view of the running-gear of the wagon with my spring attachment in position. Fig. 2 is a side elevation of a wagon with my invention applied thereto, the wheels being shown in dotted lines. Fig. 3 is a longitudinal section through the spring attachment and the bottom of the wagon-body.

Similar reference-numerals indicate similar parts in the several figures.

The front and rear bolsters are designated 1 and 2, respectively, and 3 indicates the wagon-body. These parts may be of any ordinary construction and form no part of the present invention.

The spring attachment consists of the side bars 4, each being provided at its ends with hooks 5, adapted to fit over the front and rear bolsters of the wagon to hold the attachment firmly in position.

6 represents cross-bars connecting the two side bars 4 to prevent any lateral movement between them. These cross-bars are preferably arranged at the rear end portions of the side bars, and on the cross-bars are supported semi-elliptical leaf-springs 7. The ends of the springs 7 are bent to form hooks 8, which fit over the cross-bars and securely hold the springs in position. On the upper surface of each of these springs is secured a plate 9,

which plates extend parallel with the side bars and are detachably connected to the bottom of the wagon-body 3 by bolts 10 or other suitable fastening devices. To the front ends of the side bars 4 is secured another semi-elliptical leaf-spring 11, extending transversely between them, and on the upper surface of this spring is secured a plate 12, which extends transversely of the side bars and is adapted to be detachably connected to the front end of the bottom of the wagon-body by bolts 13 or other suitable fastening devices. The ends of the spring 11 are bent to form hooks 14, which fit over staples 15, firmly secured in the side bars 4 and projecting from their lower faces.

When it is desired to use my attachment, the body of the wagon is disconnected from the bolsters and lifted up sufficiently to enable the spring attachment to be placed below it and the hooks 5 to engage with the front and rear bolsters, when the body may be lowered and secured to the plates 9 and 12. In this manner a wagon that is ordinarily used without springs for the purpose of hauling heavy loads may be converted into a spring-wagon which will be suitable for light loads or for the conveyance of passengers. It will be readily seen that the spring attachment can be put in position or removed at pleasure and that it will not necessitate any changes whatever in the body of the wagon or the running-gear ordinarily employed; also, that it will occupy very little space when not in use and will be of such weight as to be easily handled.

These attachments may be made of varying sizes adapted to fit wagons of different sizes, and it is to be understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim is—

1. A portable spring attachment for wagons, consisting of two side bars having hooks at their ends to fit over the bolsters on the running-gear, staples secured to the side bars near one end thereof, a semi-elliptical leaf-spring extending transversely between the side bars and having hooks at its ends to en-



gage said staples, cross-bars connecting the other ends of the side bars, two semi-elliptical springs supported by the cross-bars and extending parallel to the side bars, and devices to detachably connect the springs to the bottom of the wagon-body, substantially as described.

2. A portable spring attachment for wagons, consisting of two side bars having hooks at their ends to fit over the bolsters on the running-gear, a spring extending transversely across between the bars and connected thereto near their front ends, cross-bars connecting the rear end portions of the side

bars, springs supported by said cross-bars and extending parallel to the side bars, plates secured on the upper surfaces of the springs, and devices to detachably connect the plates to the bottom of the wagon-body, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM BUTLER SIMPSON.

Witnesses:

GEO. D. ALEXANDER,

WILLIE BROOM.