No. 633,000. Patented Sept. 12, 1899.

# J. H. GRESSOM.

## FIFTH WHEEL.

(Application filed Oct. 27, 1898.)

(No Model.)

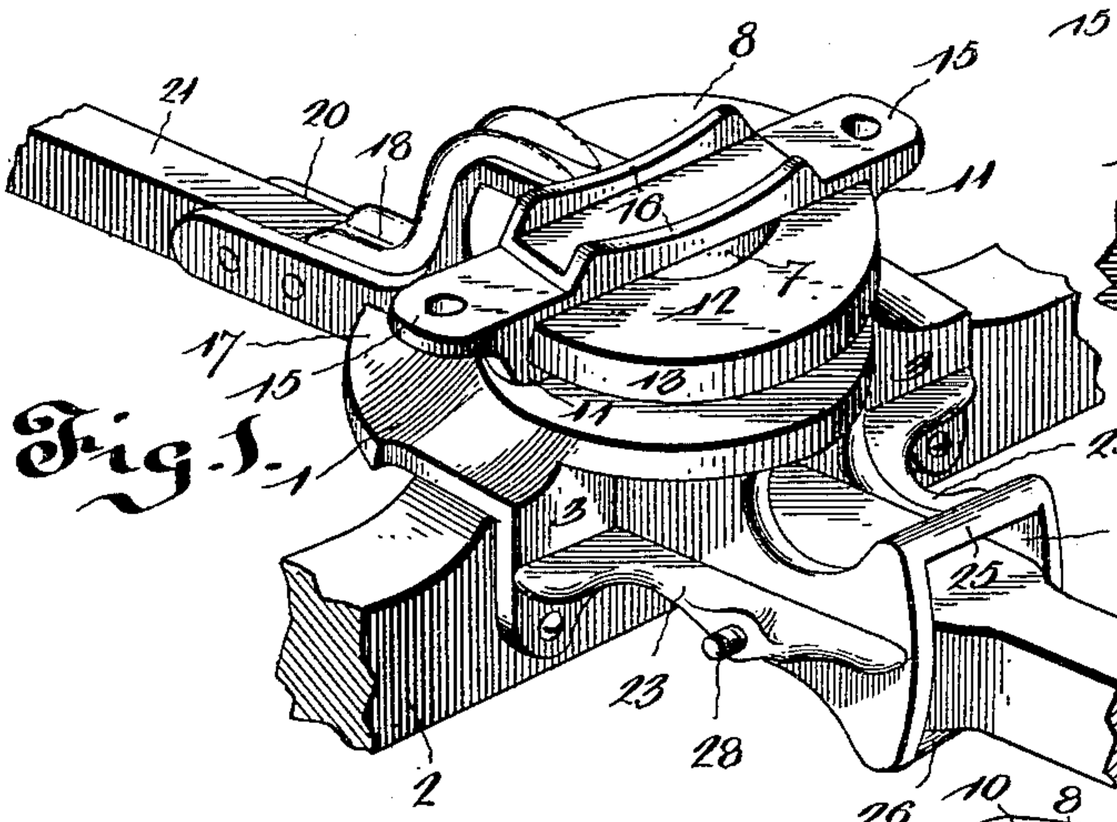

Fig. 1.

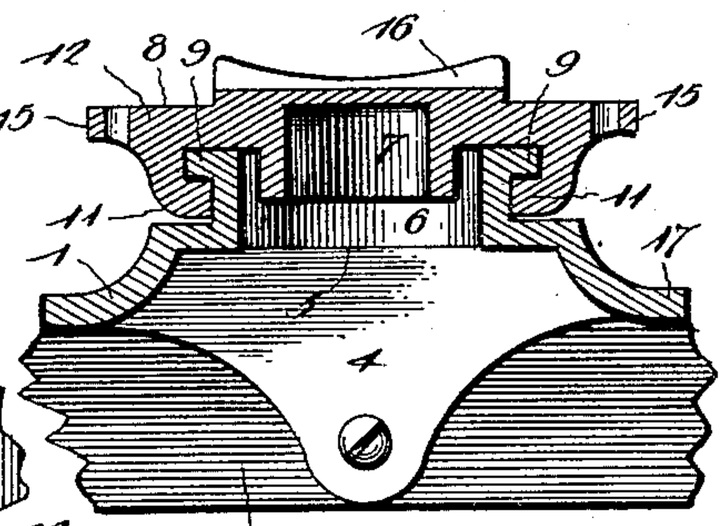

Fig. 5.

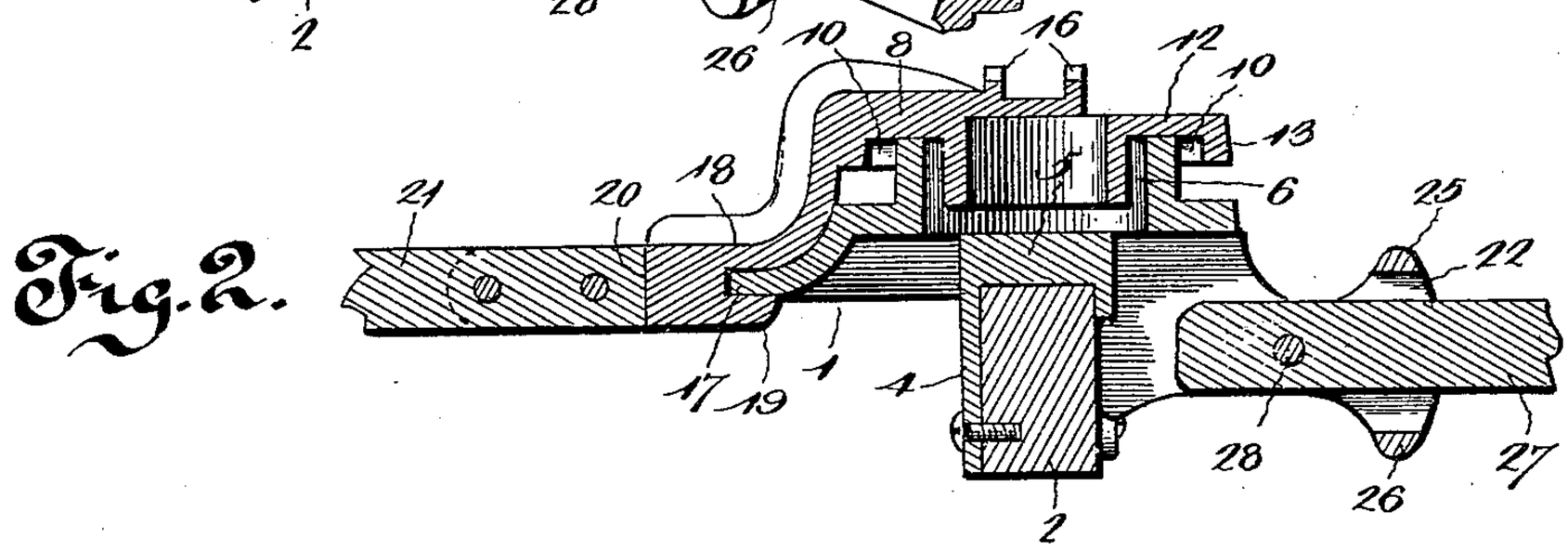

Fig. 2.

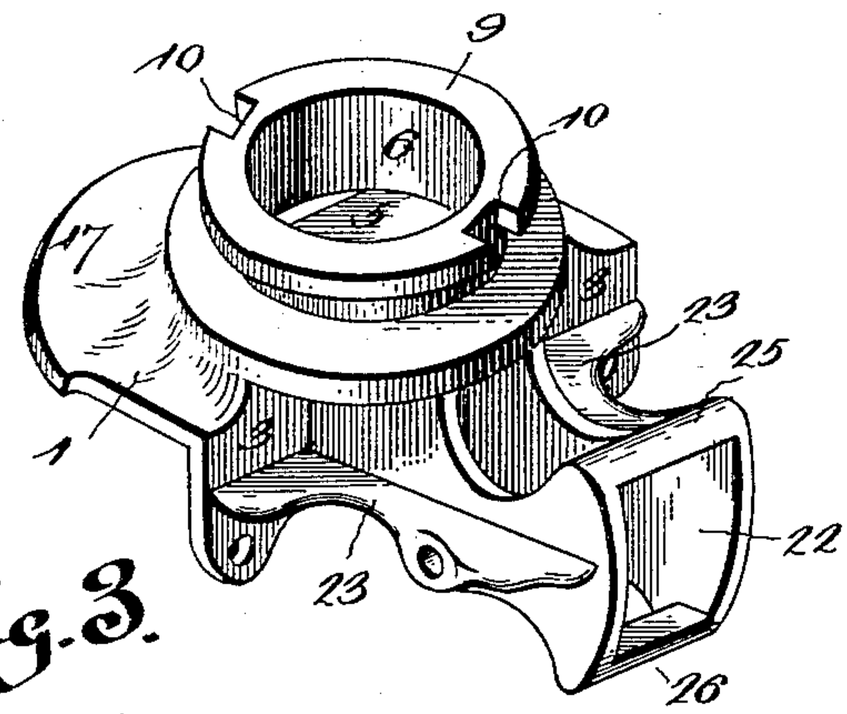

Fig. 3.

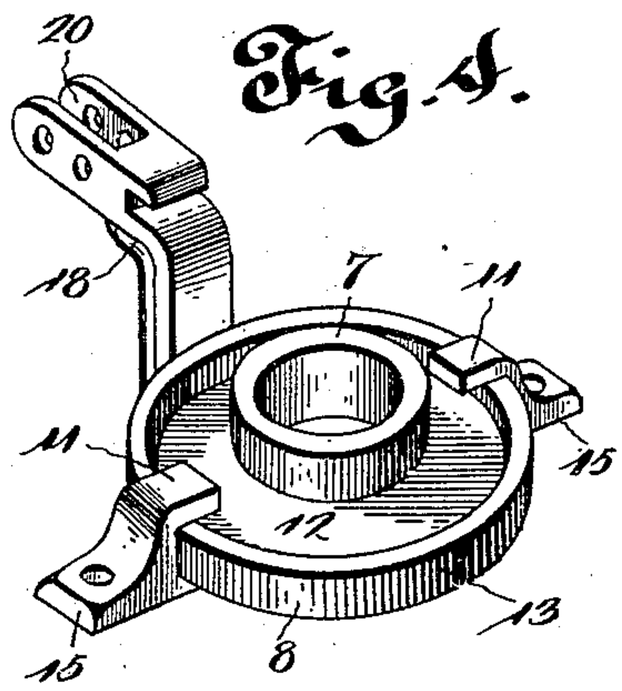

Fig. 4.

Witnesses
J. Frank Leuberwell.
T. C. Fitzpatrick

James H. Gressom Inventor.
By his Attorneys,
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# UNITED STATES PATENT OFFICE.

JAMES H. GRESSOM, OF EMERALD, WISCONSIN.

## FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 633,000, dated September 12, 1899.

Application filed October 27, 1898. Serial No. 694,688. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. GRESSOM, a citizen of the United States, residing at Emerald, in the county of St. Croix and State of Wisconsin, have invented a new and useful Fifth-Wheel, of which the following is a specification.

The invention relates to improvements in fifth-wheels.

The object of the present invention is to improve the construction of fifth-wheels and to provide a simple and comparatively inexpensive one which will increase the strength and durability of the vehicle running-gear and dispense with a king-bolt and enable the front axle to be readily separated from the reach when desired.

A further object of the invention is to improve the construction for connecting the reach and the pole of a running-gear with the front axle and to provide a device which will dispense with the front hounds without weakening the construction.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a fifth-wheel constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the lower section of the fifth-wheel. Fig. 4 is a similar view of the upper section. Fig 5 is a sectional view taken transversely of the fifth-wheel.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a lower section of a fifth-wheel mounted on a front axle 2 and provided at the front and rear faces thereof with dependent flanges 3 and 4, which are bolted or otherwise secured to the said axle. The section 1, which is provided with a horizontal bottom portion 5 to fit the top of the axle, has a centrally-arranged upwardly-extending circular bearing-socket 6 adapted to receive a depending tubular bearing portion 7 of an upper section 8 of the fifth-wheel, whereby the sections are journaled on each other to permit the necessary movement of the front axle in turning the vehicle. The lower section is provided at the base of the tubular socket 6 with a flat annular surface, and it has an outwardly-extending annular flange 9 at the top of the socket, the said flange 9 being recessed at opposite sides at 10 to provide passage-ways for lugs 11 of the upper section to permit the said lugs 11 to engage beneath the horizontal annular flange 9 of the lower section. The oppositely-disposed recesses 10 of the flange 9 are located at the front and back of the fifth-wheel, and the lugs, hereinafter more fully described, are arranged at each side of the upper section, whereby when the parts are assembled they cannot become accidentally separated by the turning of the axle incident to the use of the vehicle.

The upper section is provided at the top of its tubular bearing portion 7 with a circular plate or flange 12 and has a depending rim 13 arranged at the periphery of the plate or flange, and by this construction a cap is formed for the top of the socket 6 of the lower section. The lugs 11, which are formed integral with the upper section, extend inward from the lower edge of the depending rim 13. The upper face of the upper section is provided with a transverse enlargement 14, extending beyond the circular plate or flange and perforated to form ears 15 and provided between the ears with parallel flanges 16. This enlargement is curved between the parallel flanges to form a seat for a spring; but when the fifth-wheel is employed on a lumber-wagon or some other vehicle requiring no springs a bolster may be secured directly to the upper section by means of suitable fastening devices passing through the perforated ears 15.

The lower section of the fifth-wheel is provided with a horizontally-disposed rearwardly-extending segmental flange 17, terminating short of the front axle and adapted to be engaged by a rearwardly-extending arm 18 of the upper section to increase the interlocking action of the sections and afford greater strength and durability. The rearwardly-extending arm 18 of the upper section is substantially L-shaped, being composed of an inner depending portion and an outer substantially horizontal portion, and the upper face of the segmental flange and the adjacent

face of the body portion of the lower section form a bearing for the said arm 18. The horizontal portion of the arm 18 is provided with a horizontal lug 19, downwardly offset from the body portion of the arm and forming a recess to receive the curved edge of the segmental flange, whereby the parts are interlocked. The lug 19 is offset from the body portion of the arm by means of a socket or bifurcation 20, in which is secured the front end of a reach 21, the rear extremity of the arm 18 being enlarged to provide the socket or bifurcated portion.

The lower section of the fifth-wheel is provided at its front with a forwardly-extending substantially horizontally-disposed tongue-receiving socket 22, which is connected at its sides with the flanges 3 by means of L-shaped webs 23, which are horizontal and which greatly increase the strength of the construction. The sides of the socket, which are vertical, as shown, have their front ends enlarged and connected by upper and lower cross-pieces 25 and 26 to form an opening for a tongue 27 and also for limiting the upward and downward swing of the same. The webs and the sides are perforated to receive a horizontal pivot 28, which secures the tongue in the socket. The inner faces of the sides of the socket are parallel, and by constructing a socket in this manner the construction is cheapened, as it is unneccessary to shape a pole to conform to the arrangement of a pair of hounds.

The invention has the following advantages: The fifth-wheel, which is simple and comparatively inexpensive in construction, is applicable to all kinds of wheeled vehicles. It dispenses with the king-bolt, and while it enables the parts to be disconnected when desired, yet there is no liability of the same becoming accidentally separated while a vehicle is in use. The upper and lower sections are securely interlocked, and as the rearwardly-extending arm and the segmental flange provides an interlocking connection a considerable distance in rear of the center of the fifth-wheel it will be clear that the strength and stability of the device is greatly increased. The device provides an efficient connection for the pole and the reach, and it dispenses with the hounds at the front of a vehicle.

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.

What is claimed is—

1. In a device of the class described, the combination of the lower section designed to be mounted on the front axle and having a rearwardly-extending segmental flange and provided with an upwardly-extending bearing-socket provided at its top with an outwardly-extending annular flange recessed at opposite points, the upper section having a depending bearing portion fitting in the socket of the lower section, said upper section being provided with a circular plate or flange and having a rim depending from the same and fitting over the annular flange of the lower section, lugs extending inward from the rim and interlocking with the annular flange, and an arm extending rearward from the upper section and interlocking with the segmental flange, substantially as described.

2. In a device of the class described, the combination of the lower section designed to be mounted on a front axle and provided with a rearwardly-extending segmental flange, a bearing-socket extending upward from the lower section and provided with an outwardly-extending annular flange recessed at opposite points, the upper section having a depending tubular bearing portion to fit the said socket and provided with a depending rim to receive the annular flange and having lugs adapted to pass through the recesses thereof and engage beneath the annular flange, an arm extending rearward from the upper section, interlocked with the segmental flange and provided with a reach-socket, and a tongue-receiving socket extending forward from the front of the lower section, substantially as described.

3. In a device of the class described, the combination of a lower section designed to be mounted on a front axle and provided at its front with a forwardly-extending socket adapted to receive a tongue, and an upper section interlocked with the lower section and provided with a rearwardly-extending arm having a socket for the reception of a reach, substantially as described.

4. In a device of the class described, the combination of a lower section, an upper section interlocked with the lower section, a substantially L-shaped arm extending rearward from the upper section, supported by the lower section and provided at its rear end with a socket or bifurcation adapted to receive a reach, and a lug extending forward from the socket or bifurcation and engaging under the adjacent portion of the lower section, 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.

JAMES H. GRESSOM.

Witnesses:
W. J. EGBERT,
ROBERT E. GRESSOM.