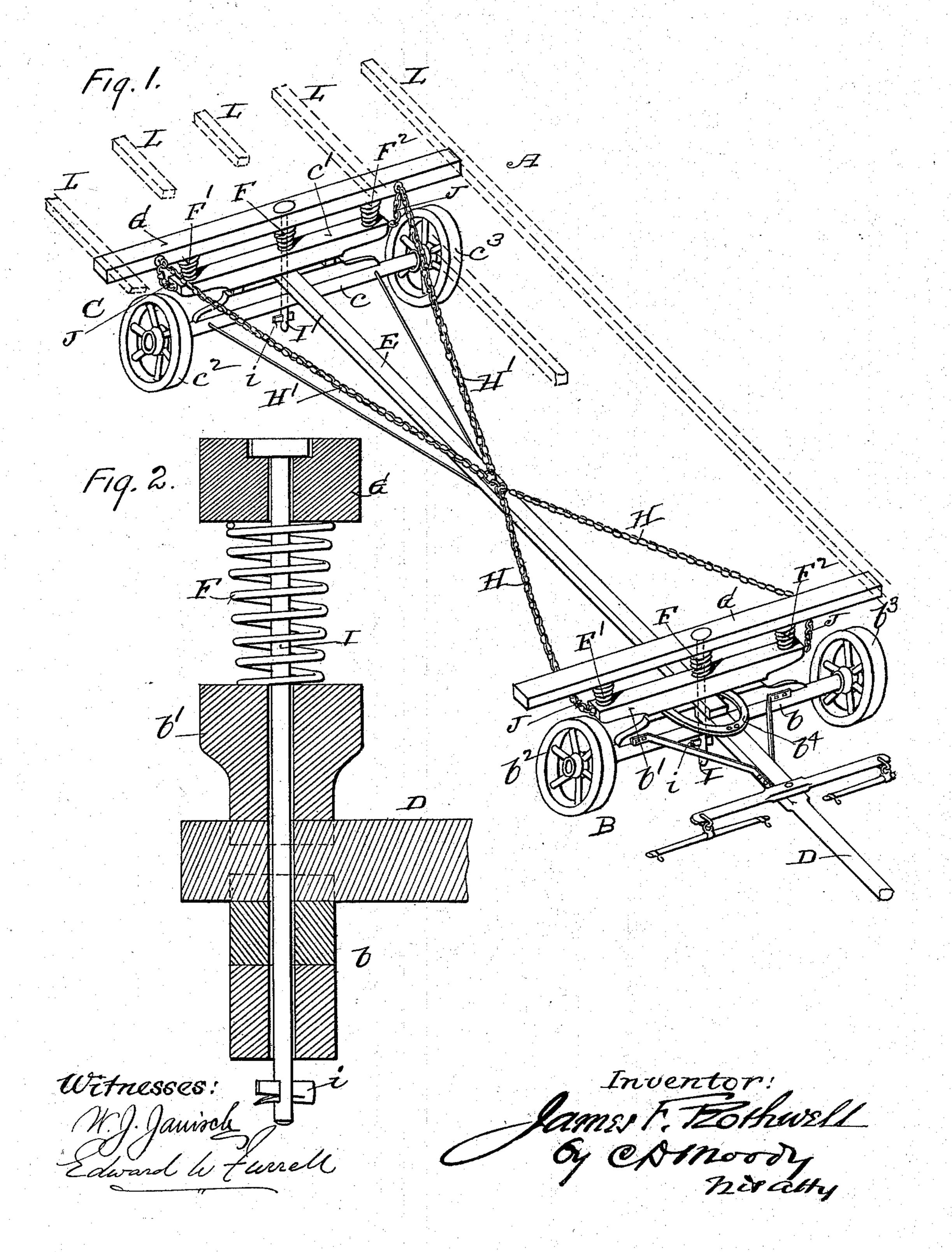
## J. F. ROTHWELL. MOVABLE HOUSE.

No. 528,131.

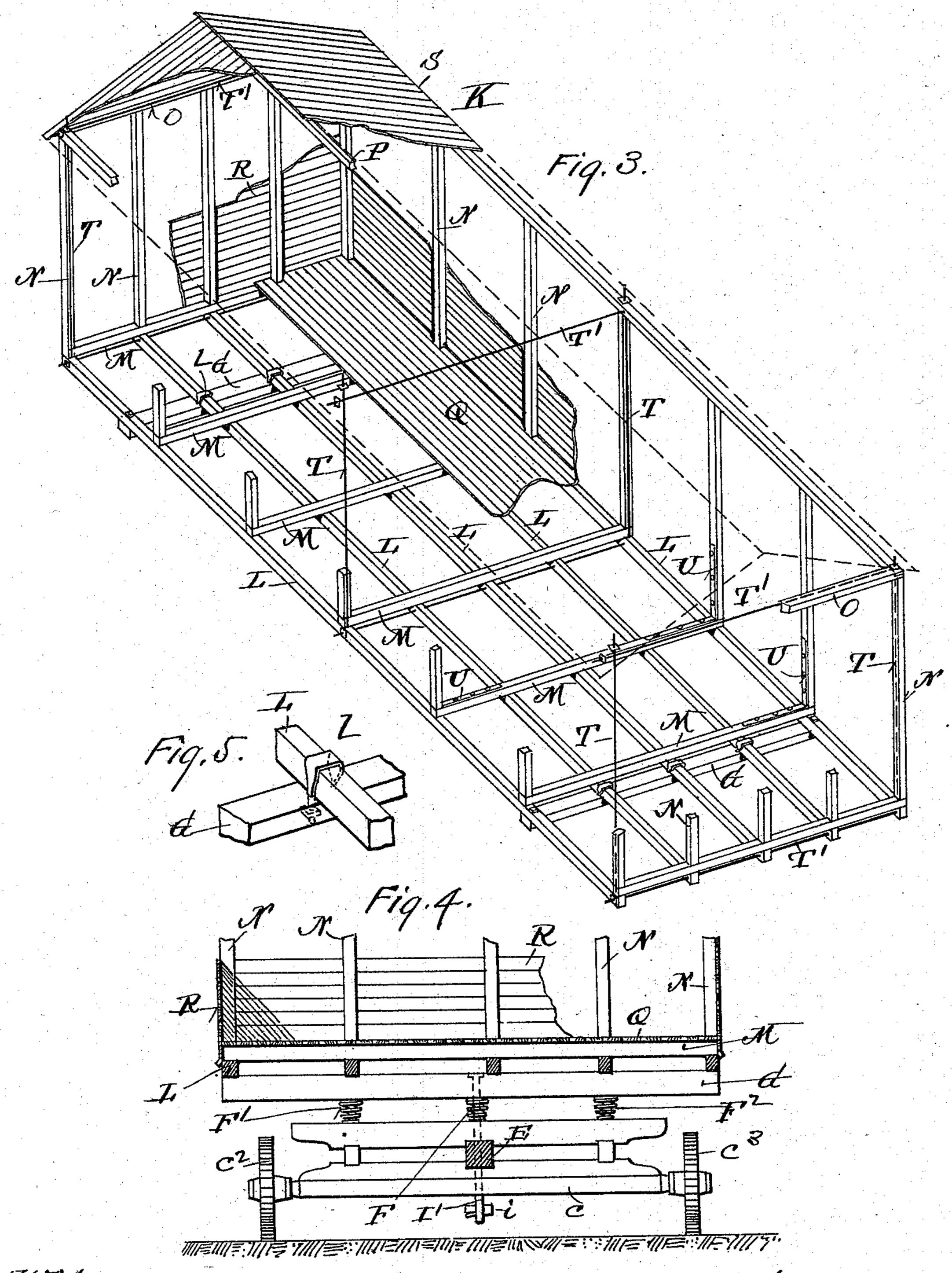
Patented Oct. 23, 1894.



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Witnesses: W.J. Jawirch James F. Fothwell
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## United States Patent Office.

JAMES F. ROTHWELL, OF ST. LOUIS, MISSOURI.

## MOVABLE HOUSE.

SPECIFICATION forming part of Letters Patent No. 528,131, dated October 23, 1894.

Application filed January 4, 1894. Serial No. 495,677. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. ROTHWELL, of St. Louis, Missouri, have made a new and useful Improvement in Movable Houses, of 5 which the following is a full, clear, and exact

description.

The improvement relates to the class of houses that are supported upon wheels, and it consists partly in the mode of constructing to the house, partly in the mode of constructing the running gear, and partly in the mode of uniting the house and gear, substantially as is hereinafter set forth and claimed, aided by the annexed drawings, making part of this

15 specification, in which—

Figure 1 is a view in perspective of the running gear of the construction; Fig. 2, a vertical section, upon an enlarged scale, in the plane of one of the king bolts; Fig. 3, a view 20 in perspective of the house, portions of its walls, bottom and roof being broken away, to exhibit the framing of the house more distinctly; Fig. 4, an end elevation of the hind gear, and including the adjoining portion of 25 the house, and Fig. 5 a detail.

The same letters of reference denote the

same parts.

My aim is mainly to provide quarters for laborers, capable of being readily shifted 30 from place to place, and that are sufficiently stable at all times, both when the house is stationed, temporarily at any point, and during its removal from one place to another.

A represents the running gear of the con-

35 struction.

B represents the fore gear and C the hind gear. The gears B and C, are substantially alike saving that the fore gear, by means of a fifth wheel, or other equivalent mechan-40 ism, is adapted to be turned in the ordinary manner. In the fore gear b represents the axle; b', the bolster;  $b^2$ ,  $b^3$ , the wheels, and  $b^4$ the fifth wheel. In the hind gear the axle is shown at c, the bolster at c', and the wheels 45 at  $c^2$ ,  $c^3$ .

D represents the tongue or pole.

E represents the perch.

A series of springs F, F', F<sup>2</sup>, is mounted upon the bolster of each of the gears B and 50 C, and a plate G rests upon the springs. The bolster, the springs, and the plate are suitably united, and to more firmly connect these

parts, and to steady the springs as well as the entire superstructure resting upon the springs, a bolt (the bolt I in the fore gear, 55 and the bolt I' in the hind gear) is passed downward through the plate and through the middle spring F, the bolster, the axle, and any interposed part such as the perch or tongue.

From the nature of the construction it is 60 very desirable to use coiled springs, substantially as shown to support the plates G. No other ordinary form of spring answers as well. At the same time care must be taken to provide against lateral displacement. The su- 65 perstructure in most instances is necessarily bulky. Even when stationary it offers considerable resistance to the wind; and while being moved it is liable in passing over irregularities in the ground to sway to such an 70 extent as to cause the springs to be bent if not displaced. The bolts I and I', are of material value as a means for preventing such a displacement. In the fore gear but a single bolt is used, and but a single one is shown in 75 the hind gear; but additional bolts can be used in the hind gear in connection with the springs F', F2, respectively; and a further stay for the plates G is provided in the ties H, H, and H', H', which at one end are con- 80 nected with the perch and lead thence to the plates G, G, substantially as shown. By this means the plates G and the house which is sustained upon the plates are not only stayed laterally but are also held from turning more 35 or less around to be out of parallel with the bolsters underneath. The bolts, when the springs are compressed, work vertically in their bearings in the gears. Each bolt at its upper end is suitably headed to enable it to 90 be upheld, and a suitable key i, in its lower end prevents it from being accidentally uplifted out of place, but when it is desired to separate the parts, the key i, can be readily removed from the bolt. Chains J connect each 95 plate G with its bolster to limit the upward vibration of the springs. The running gear is generally of unusual length and width. The plates G in length are preferably sufficiently long to overhang the wheels in order 100 to provide for suitably sustaining a house K of sufficient width. The preferred mode of constructing the house is shown. A series of longitudinally-extended sills L rests upon the

plates G and are suitably secured thereto, and preferably so as to be detachable therefrom, and to this end the clips l, are employed substantially as shown to connect the sills and plates. A series of cross pieces or joists M is attached to the sills.

N N represent studs, O O cross plates at the upper end of the studs, and P the ridge pole.

Q represents the floor, R the siding, and S to the roof; but in addition to this ordinary construction the house is tied by the system of upright rods T and cross rods T' which are at their ends secured to the described framing substantially as shown.

Braces U are preferably used at various parts of the house-frame to stiffen the connection of the studs with their support.

I claim—

The combination with the fore and hind

gears, the bolsters, the perches, the plates located above the bolsters, the coiled springs interposed between the said plates and bolsters, the bolts connecting said plates and bolsters together, and the crossed stay chains connecting the front bolster and stay plate 25 with the rear bolster and stay plate, of the side sills resting on said cross plates, the clips connecting said sills and plates, the cross pieces secured to said sills, the studs, the cross plates at the upper ends of the studs, 30 the ridgepole, the floor, the siding and the roof, substantially as described.

Witness my hand this 30th day of Decem-

ber, 1893.

JAMES F. ROTHWELL.

Witnesses:

C. D. Moody,

A. BONVILLE.