



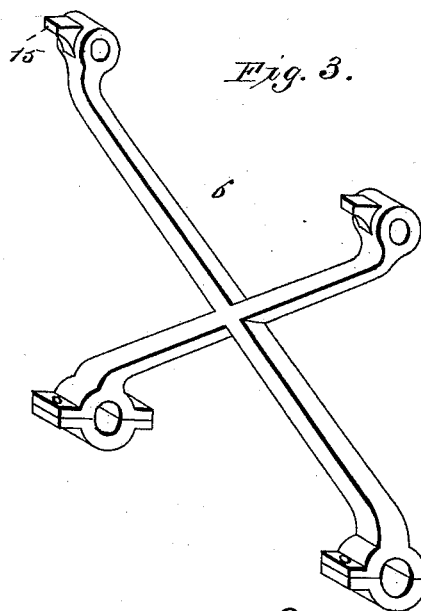
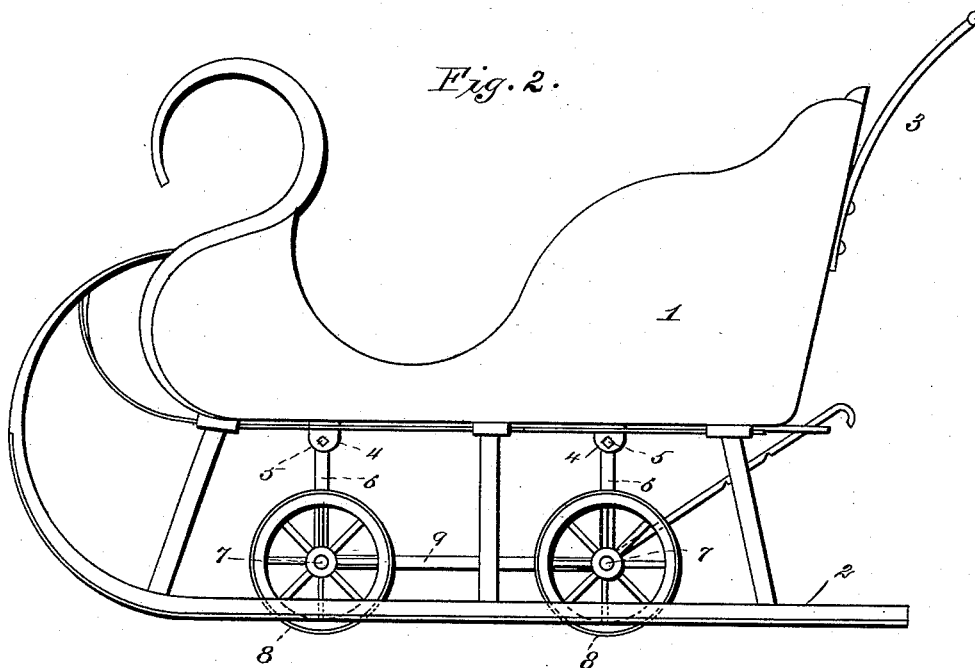
(No Model.)

2 Sheets—Sheet 2.

H. GRICE.  
COMBINED SLEIGH AND CARRIAGE.

No. 423,241.

Patented Mar. 11, 1890.



Witnesses  
W. B. Harris  
W. W. Moffett

Inventor  
Henry Grice  
By Figgens & Co  
Attorneys

# UNITED STATES PATENT OFFICE.

HENRY GRICE, OF ACKLEY, IOWA.

## COMBINED SLEIGH AND CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 423,241, dated March 11, 1890.

Application filed December 30, 1889. Serial No. 335,311. (No model.)

### *To all whom it may concern:*

Be it known that I, HENRY GRICE, a citizen of the United States, residing at Ackley, in the county of Hardin and State of Iowa, have invented certain new and useful improvements in Combined Sleighs and Carriages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to combined sleighs and carriages, and has for its object to construct a sleigh that can be readily made into a carriage without the necessity of removing the runners from the sleigh; and it consists in the construction and novel arrangements of parts, as hereinafter specified, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings, Figure 1 is a side view of a sleigh embodying my invention; Fig. 2, a like view with the runners raised and the sleigh used as a carriage; Fig. 3, a detail of one of the hangers; Fig. 4, a plan view of the running-gear.

Referring to the drawings, in which like numerals indicate corresponding parts in all the figures, 1 designates the body of the sleigh, having secured thereto in the usual well-known manner runners 2, and provided at its back with a handle 3, by means of which the sleigh or carriage may be readily guided. At suitable points on the bottom of the sleigh and between the runners 2 are secured dependent lugs 4; provided at their lower ends with squared apertures, into which are designed to fit the squared ends of the hanger-shafts 5. 6 indicates hangers constructed of wrought or malleable iron and of the form of the letter X, and provided at their upper ends with bearings, through which passes shaft 5. At the lower ends of the hangers are formed bearings, in which are designed to fit the axles 7 and have secured at their outer ends the wheels 8. In order that the hangers and wheels may be kept at a fixed distance, I place between the hangers a reach 9, secured to the axles outside the ends of the hangers by means

of couplings, and, as will be indicated, this reach is of the form of the letter X, and to enable me to readily change the sleigh to a carriage without removing the runners, and vice versa, I form on the rear axle, between the ends of the reach, perforated lugs 10, between which are designed to be fastened a lever 11, which passes upward through a catch 12, secured to the bottom of the sleigh.

In order that the wheels may be retained in their raised or lowered position at will, I form on said lever V-shaped notches 13, designed to engage in the catch 12, and retained therein by a leaf-spring 14, secured to the back of the sleigh, its free end pressing against the lever.

To prevent the wheels, when in their lowered position, from passing too far forward, I provide the hangers with stops 15, adapted to strike against the bottom of the sleigh.

The operation of my combined sleigh and carriage, taken in connection with the drawings and description, will be readily understood by those skilled in the art.

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

1. In a combined sleigh and carriage, the combination, with the body thereof, of the X-shaped hangers having at their upper ends bearings through which pass a shaft having squared ends entering similar openings in lugs dependent from the bottom of the sleigh, the stops on the hangers, and the axle secured in bearings at the lower ends of the hangers, and means, substantially as described, for raising and lowering the wheels, for the purposes specified.

2. The combination, with the hangers provided at their upper ends with bearings through which passes a shaft having squared ends adapted to enter the openings in the lugs dependent from the bottom of the sleigh, of the axles secured in the bearings formed in the lower ends of the hangers, and the reach secured to the axles by means of couplings, substantially as described.

3. The combination, with the hangers provided at their upper ends with bearings

through which passes a shaft having squared  
ends designed to enter similar openings in  
lugs dependent from the sleigh, of the axles  
secured in bearings at the lower ends of the  
5 hangers, the reach secured by means of coup-  
lings to the axles, the lugs on the rear axle to  
which are pivoted the ends of the lever 11,  
the catch on the bottom of the sleigh, and the

spring for retaining the lever in position, sub-  
stantially as described. 10

In testimony whereof I affix my signature  
in presence of two witnesses.

HENRY GRICE.

Witnesses:

GEO. W. MEIGER,  
BEN. HAYUNGA.