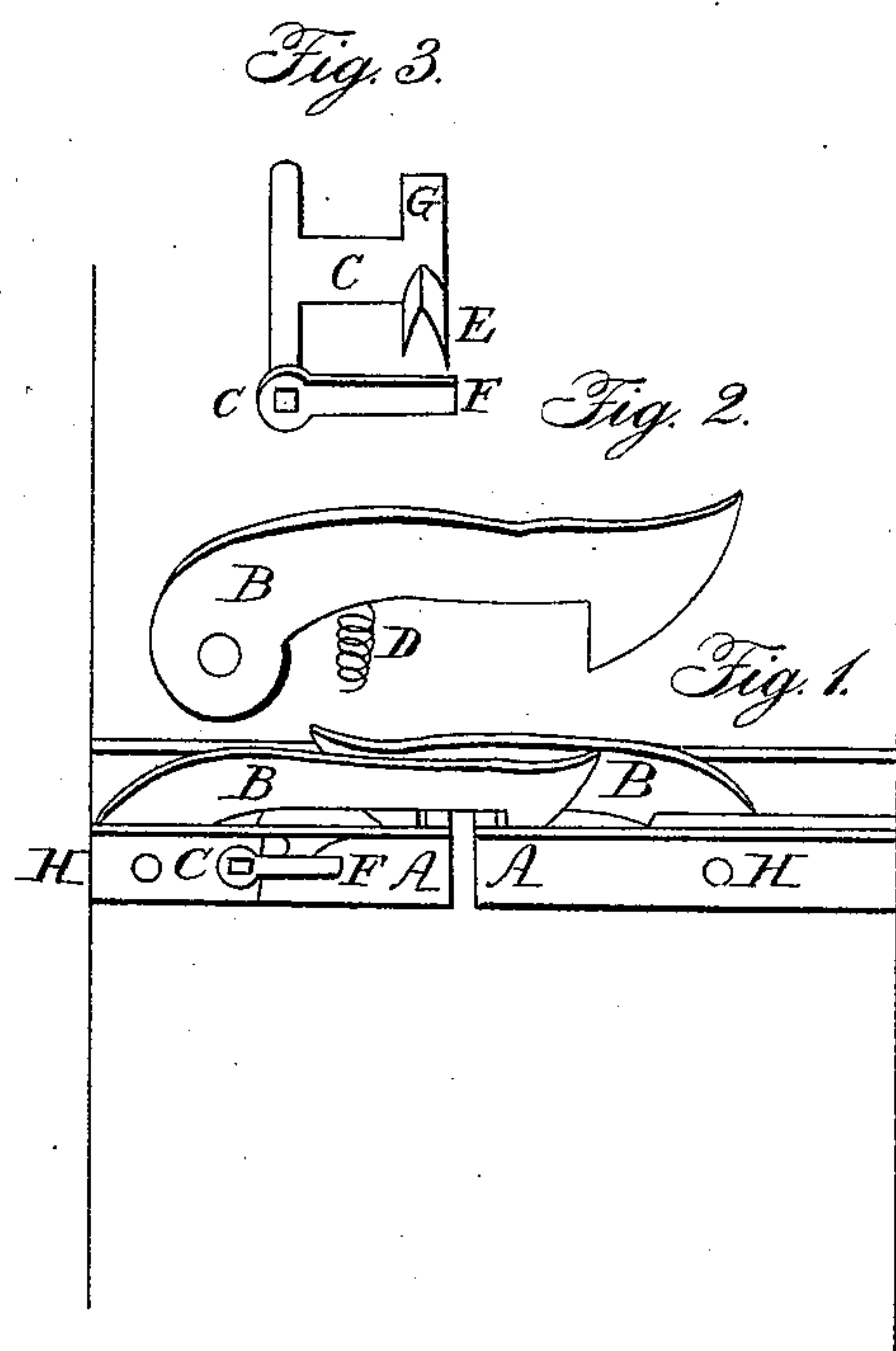


J. D. ALVORD.

Car Coupling.

No. 6,728.

Patented Sept. 18, 1849.



Witnesses:

Apello, Munn
Lew R. Butler

Inventor:

Joseph D. Alvord

UNITED STATES PATENT OFFICE.

JOSEPH D. ALVORD, OF SPRINGFIELD, MASSACHUSETTS.

COUPLING FOR CARS.

Specification of Letters Patent No. 6,728, dated September 18, 1849.

To all whom it may concern:

Be it known that I, JOSEPH D. ALVORD, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Machine, being a great improvement upon old methods, called a "Double Self Adjusting Railroad-Car Shackle," reference being had to drawings and a model accompanying this.

10 The machine consists of two horizontally placed hooks (Figure 1, B, B,) one at each end of the car attached to the bunter (A, A,) so formed, and so attached, that on bringing the cars together, the hooks will fall into
15 sockets in the respective opposite cars, as exhibited by Fig. 1 of the drawings and by the model, by the force of gravitation, or, if additional power is required, by the aid of a spring under the hook, as in Fig. 2
20 letter D, of the drawings; and thus, without the aid of any person between the cars, a train of an indefinite number of cars can be at once securely connected and fitted together. A disconnecting lever is also at-
25 tached, a side view of which, is given in Fig. 3, by which a separation can be effected, by a rod or chain attached to the end of the lever handle (F, Figs. 1 and 3,) and extended to any desirable point on the plat-
30 form, or top, of the cars. In the bottom of Fig. 3 the letter C, indicates the lever ful-

crum; F, the handle of lever; E, projection that raises the first hook; G, projection that raises the second hook; the whole figure presenting a side view.

The capacity of the machine for self-adjustment by the laws of gravitation and the collateral aid of the spring, if necessary, in its application to railroad cars, the ease and certainty by which a separation can be pro-
40 duced by the lever attached, and the advantage of the immediate disconnection that would follow, in case of an accident by which one car should be thrown off the track and down an embankment, are important
45 improvements and principles claimed by the inventor.

The machine entirely obviates the labor, delay and danger to life and limb, that attend other contrivances for shackling when
50 the presence of a person is required between the cars, or on the platforms when they are often violently brought in contact with each other. The above, with drawings and model, furnish a full and exact descrip-
55 tion.

In witness whereof, I have hereunto subscribed my name the 7th day of June 1849.

JOSEPH D. ALVORD.

In presence of—

JAMES W. CROOK,
SMITH BARRETT.