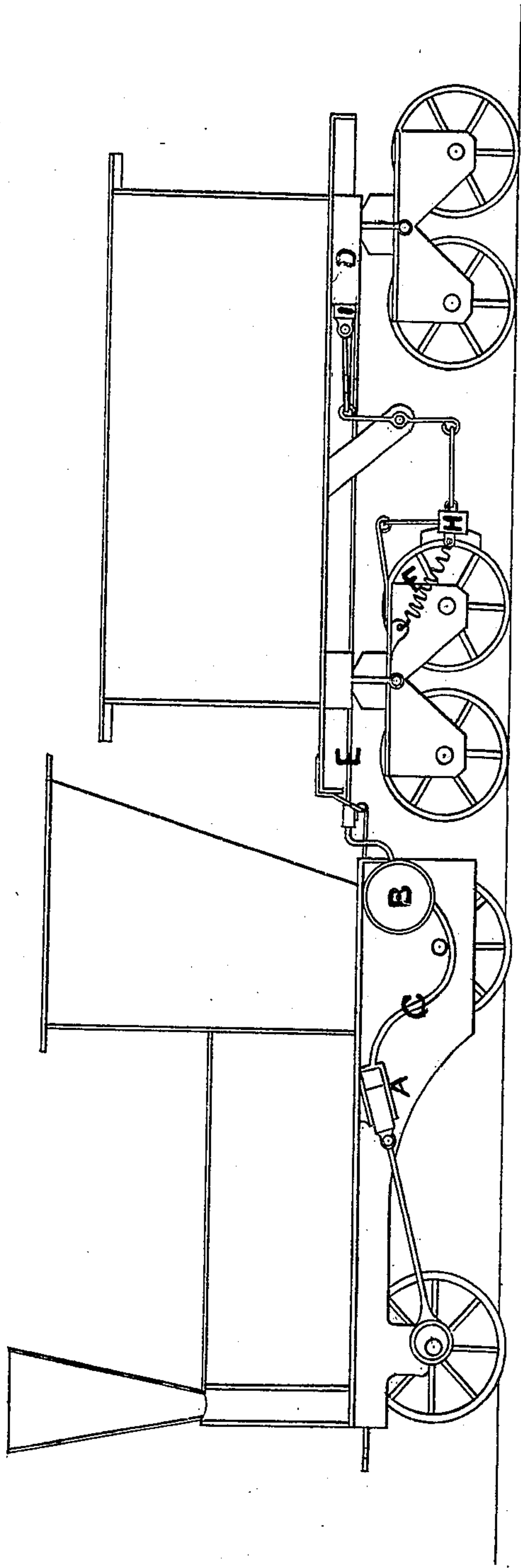


T. E. SICKELS.
CAR BRAKE.

No. 105,264.

Patented July 12, 1870.



Inventor

J. O. Dickels

Witness

L. P. Burdham.
J. B. Kelsey.

United States Patent Office.

THEOPHILUS E. SICKELS, OF KENNETT'S SQUARE, PENNSYLVANIA.

Letters Patent No. 105,264, dated July 12, 1870.

IMPROVEMENT IN CAR-BRAKES.

The Schedule referred to in these Letters Patent and making part of the same.

I, THEOPHILUS E. SICKELS, of Kennett's Square, in the county of Chester, and State of Pennsylvania, have invented certain Improvements in Car-Brakes, of which the following is a specification.

The nature of this improvement consists in the combination of an air-pump and an air-reservoir with a spring operating to apply brakes to railroad cars.

In the accompanying drawing—

A is the air-pump.

B is the air-reservoir, with a pipe, C, to convey air from the pump to the reservoir B.

D is the air-cylinder, with pipe E to convey air from the reservoir B to the cylinder D.

The pipe E should have a three-way cock in it, convenient to the engineer, to enable him to shut off air from passing from the reservoir to the cylinder D, and, by the same movement, to open a communication from the cylinder D to the external air, so as to allow the compressed air in the cylinder to escape,

and thus permit the spring F to apply the brakes as desired, so that, while the pressure of air is maintained in the cylinder D to force out the plunger I, the spring F is stretched, and the brakes are held away from the wheels, but, when the air-pressure in the cylinder D is released, the spring F draws the brake H against the wheels, and forces the plunger I into the cylinder D.

It is evident that the air-pump can be worked by some moving part of the locomotive, or by an independent engine, or by hand-power.

I claim—

The combination of an air-pump and an air-reservoir with a spring that applies the brakes when the air-pressure is released, substantially as described.

T. E. SICKELS.

Witnesses:

OSCAR F. DAVIS,
J. H. REED.