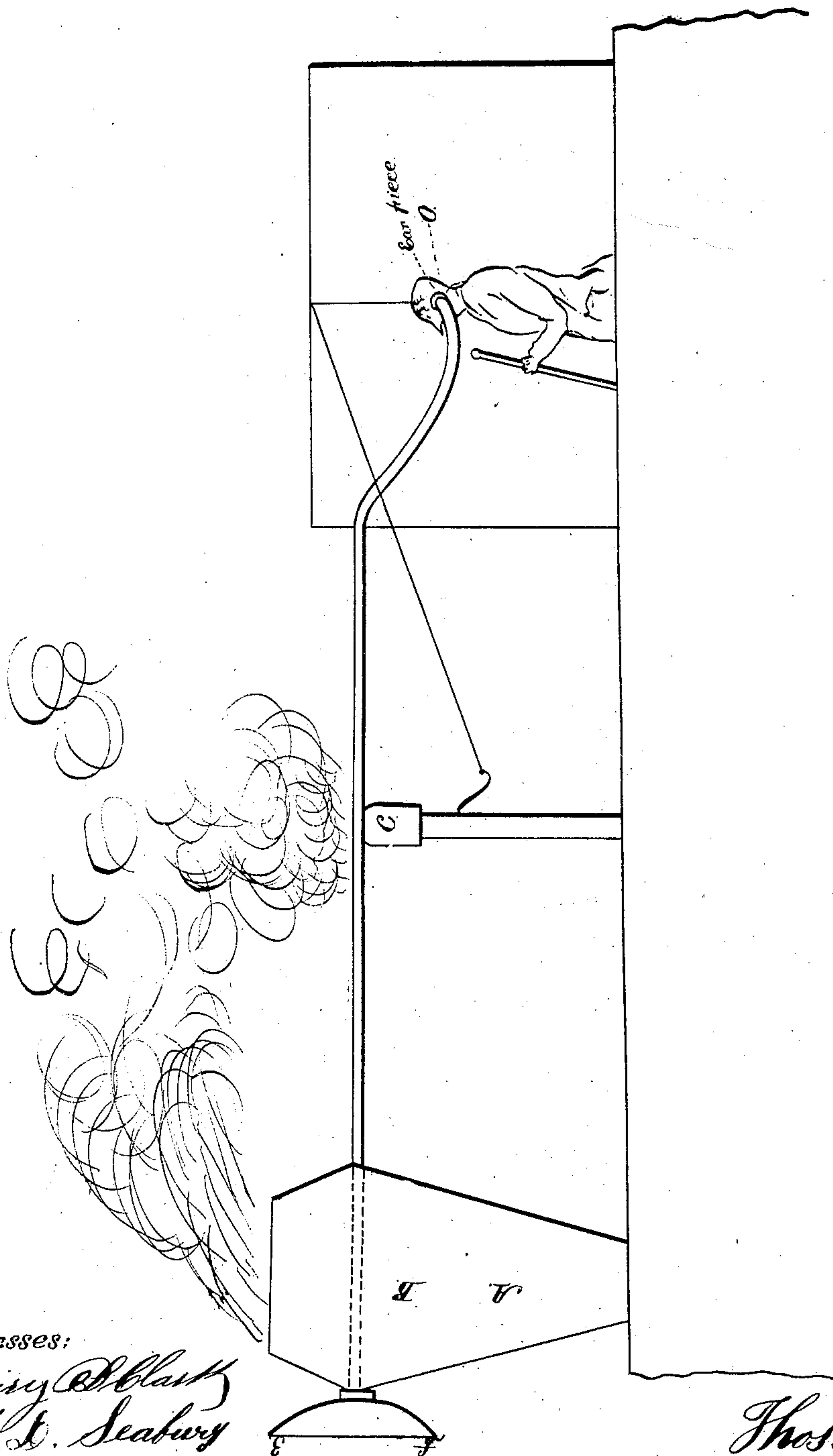


T. A. Davies.

Preventing Collisions on Railroads.

N^o 8,719.

Patented Feb. 10, 1852.



Witnesses:

Henry C. Clark
Jacob L. Seabury

Inventor:

Thos. A. Davies

UNITED STATES PATENT OFFICE.

THOMAS A. DAVIES, OF NEW YORK, N. Y.

MODE OF PREVENTING COLLISION ON RAILROADS.

Specification of Letters Patent No. 8,719, dated February 10, 1852.

To all whom it may concern:

Be it known that I, THOMAS A. DAVIES, of the city, county, and State of New York, have invented a new Mode of Railroad-Telegraphing by which Any One Engine Can Hear the Approach of Another.

The nature of my invention consists in applying to a locomotive engine a sound gatherer with an ear piece in such a manner that any extraordinary noise made by the approach of a train or by a steam whistle or any known way of making a great noise is gathered and communicated to the ear of the engineer in time to stop his engine or train as the case may be. The mode in which this is done I proceed to describe.

By referring to the drawings suppose A B to be the smoke pipe of the locomotive engine which is furnished with all the appendages of a locomotive with steam whistle at C. Suppose E F to be a concave sound gatherer made in any known way with a tube connecting it with the ear of the engineer by means of an ear piece at O. The engineer is provided with a cap which closes one ear and the other is in connection with the sound gatherer by means of the ear piece and tube. This will nearly close his ears to any sounds except those which come from the front of the engine. The sound gatherer being placed high upon the smoke pipe and in front of it will gather but little of the sound of the train behind. Now suppose two trains approaching each having the sound gatherers arranged as above, and sup-

pose each train in its ordinary running made sufficient noise for the purpose of the engineer to hear the approach of each train in time to stop before a collision could take place. But if the ordinary noise of a train would not be sufficient each could arrange a mode by means of steam whistles blowing at intervals or any other known way of making a noise so that each engineer could be warned of the approach of a train and in that way effectually prevent collision.

I shall not pretend to go into the various modes of arranging the steam whistles as the most convenient and most effective place would be to arrange the whistles in the center of the sound gatherer so that the sound would be thrown forward and not annoy the passengers of the train. Of course it would be so arranged as to shut off the sound to the ear of the engineer while the whistle was blowing.

What I claim as new and original and desire to secure by Letters Patent, is—

The application of a sound gatherer with an ear piece to a locomotive engine or train of cars arranged substantially as above described so that the engineer or another can ascertain by sound the approach of a locomotive or train in time to prevent collision.

THOS. A. DAVIES.

Witnesses:

HENRY D. CLARK,
JACOB D. SEABURY.