

(No Model.)

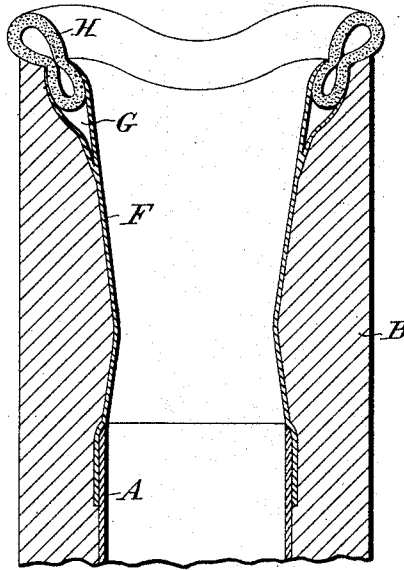
2 Sheets—Sheet 1.

H. ROSE.
SPEAKING TUBE.

No. 490,364.

Patented Jan. 24, 1893.

Fig. 1.



Witnesses
Albert Jones
John F. Gairns

Inventor
Henry Rose
By his attorneys
Wheatley & Mackenzie

H. ROSE.
SPEAKING TUBE.

No. 490,364.

Patented Jan. 24, 1893.

Fig. 3.

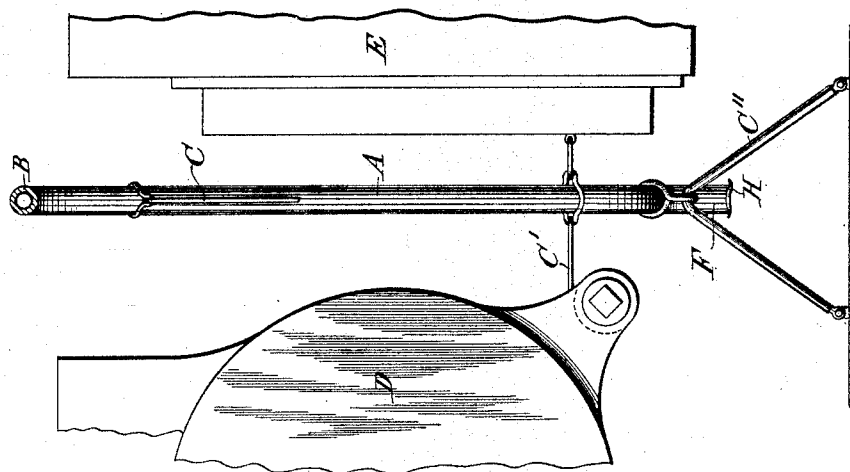
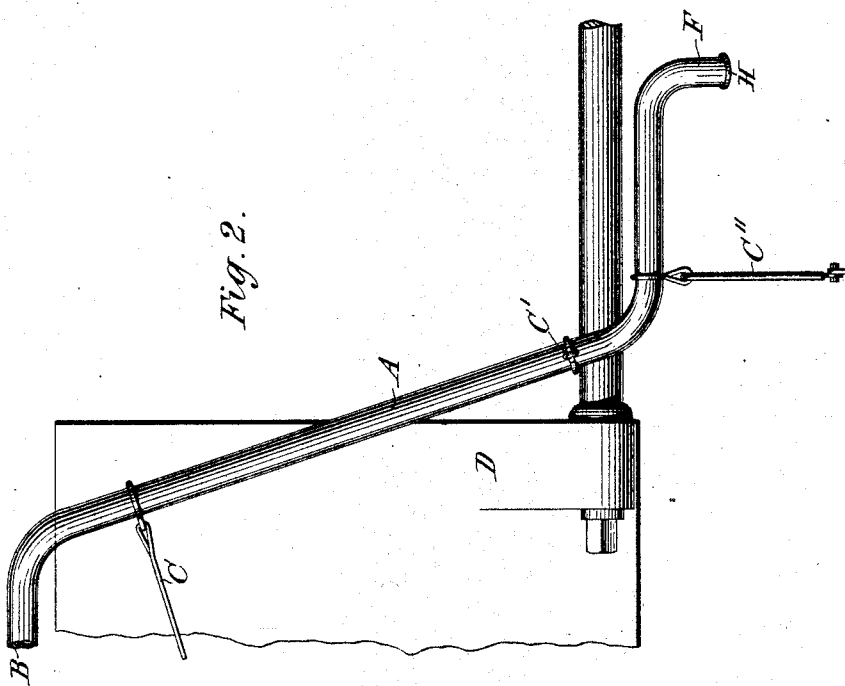


Fig. 2.



Witnesses
Albert Jones.
John F. Cairns

Inventor
Henry Rose
By his attorneys
Wheatley & MacKenzie

UNITED STATES PATENT OFFICE.

HENRY ROSE, OF THE BRITISH ROYAL NAVY.

SPEAKING-TUBE.

SPECIFICATION forming part of Letters Patent No. 490,364, dated January 24, 1893.

Application filed September 27, 1892. Serial No. 447,038. (No model.) Patented in Italy June 30, 1892, No. 32,137.

To all whom it may concern:

Be it known that I, HENRY ROSE, captain in the British Royal Navy, a subject of the Queen of Great Britain and Ireland, and a resident on board Her Majesty's ship *Rodney*, forming part of the Channel squadron, have invented certain new and useful Improvements in or relating to Voice-Tubes, commonly called "Speaking-Tubes," (for which I have obtained a patent in Italy, No. 32,137, bearing date June 30, 1892;) 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.

This invention relates to means of improving the efficiency of speaking tubes so that they may be available in situations where they are necessarily surrounded by noises due to vibrating portions of machinery particularly for example in the case of a speaking tube carried from the bridge to the engine room of a great steamship. In such cases I clothe the pipes with sheet felt or other suitable non conducting material of considerable thickness having preferably an outer covering of canvas. The pipes thus lagged I suspend freely by india rubber bands or stays and so eliminate or reduce to a minimum any vibratory action. In places where it is absolutely necessary to stay the pipe to bulkheads by means of a bracket I bed the pipe in the bracket with india rubber of considerable thickness intervening between the pipe and the bracket. I clothe the mouth-piece of the speaking tube in the manner hereinbefore described with reference to the pipe and I provide it with a tubular india-rubber ring so that it readily adapts itself to the head of the person using the same as a receiver shutting out all surrounding noises.

In the accompanying drawings in all the figures of which the same part is indicated by like reference letters; Figure 1 is a sectional elevation of the mouth-piece or receiver and a portion of the pipe to which it is attached. Fig. 2 is a side elevation and Fig. 3 is a plan showing a speaking tube fitted in close proximity to the machinery in the engine room.

A is the speaking tube clothed in non conducting material B and suspended by the india rubber guys C C' C'' between the high and low pressure cylinders in an engine room represented in part and indicated respectively by the reference letters D E. The mouth piece or receiver F is formed with a recess or pocket G into which an india rubber tube H is embedded as shown in Fig. 1 to form a cushion for the purpose of closely fitting to the head of the person using the same in order to shut out all external sounds.

What I claim and desire to secure by Letters Patent is:

1. A voice tube or speaking tube clothed with non conducting material and carried by elastic suspension guys substantially as and for the purpose described.

2. A mouth piece or receiver for voice tubes or speaking tubes clothed with non conducting material and provided with an elastic encircling cushion at its orifice substantially as and for the purpose described.

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

HENRY ROSE.

Witnesses:

T. F. BARNES,
W. J. NORWOOD.