

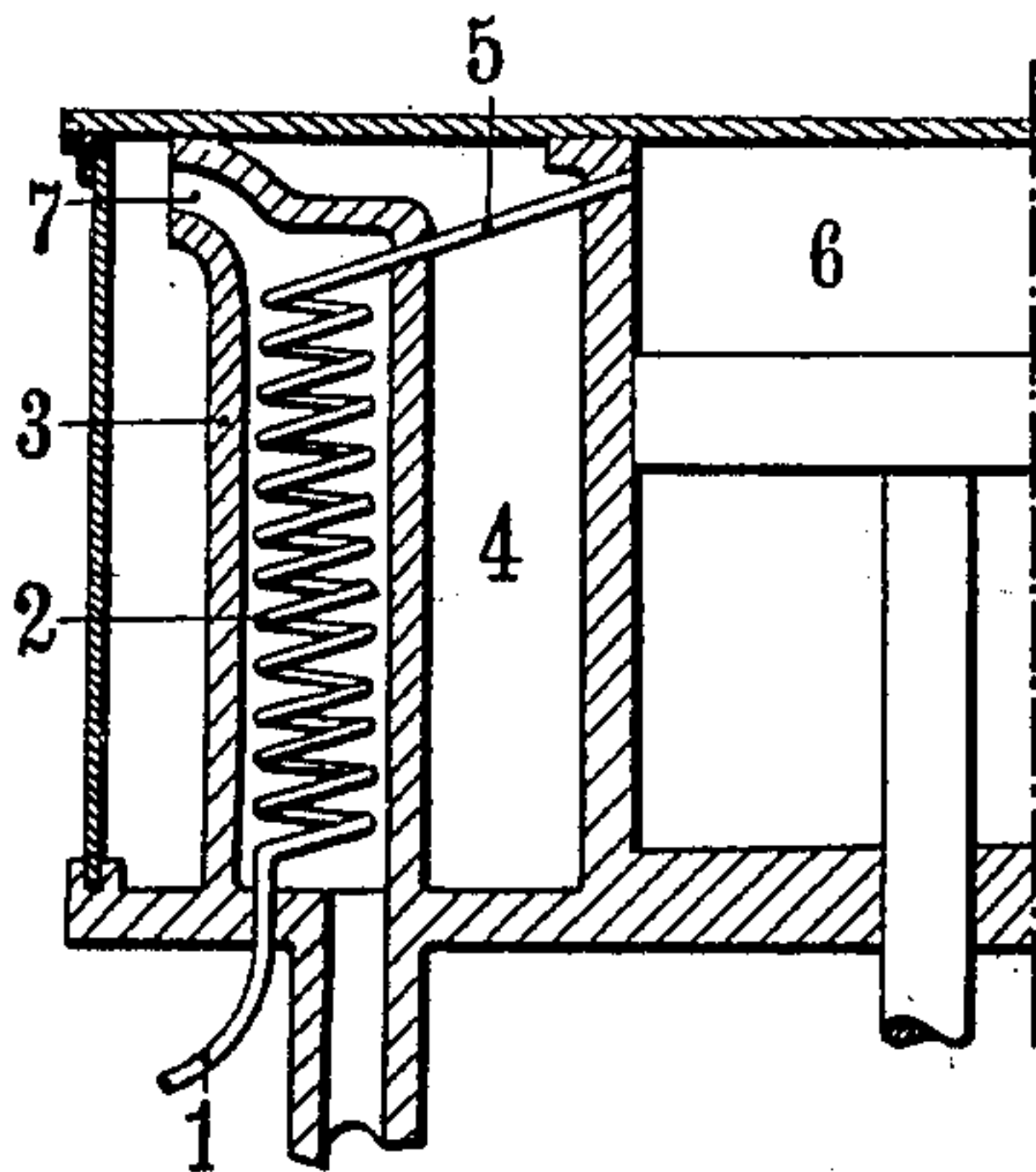
A. E. JONES.

MEANS FOR INJECTING WATER INTO THE CYLINDERS OF COMPRESSORS.

APPLICATION FILED FEB. 25, 1908.

913,661.

Patented Feb. 23, 1909.



WITNESSES :

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UNITED STATES PATENT OFFICE.

ALBERT EDWARD JONES, OF FIUME, AUSTRIA-HUNGARY, ASSIGNOR TO WHITEHEAD AND COMPANY, OF FIUME, AUSTRIA-HUNGARY, A CORPORATION.

MEANS FOR INJECTING WATER INTO THE CYLINDERS OF COMPRESSORS.

No. 913,661.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Original application filed November 1, 1907, Serial No. 400,199. Divided and this application filed February 25, 1908. Serial No. 417,715.

To all whom it may concern:

Be it known that I, ALBERT EDWARD JONES, a subject of the King of Great Britain, residing at Via Volosca, Fiume, in the Kingdom of Hungary, have invented certain, new and useful Improved Means for Injecting Water into the Cylinders of Compressors, of which the following is a specification, this being a division of the application for Letters Patent for an improvement in air compressors and the like, filed by me on November 1, 1907, Serial No. 400,199.

This invention has for its object improvements in compressors for air or other gases and relates more particularly to means for automatically supplying the cylinders with injection water.

The invention comprises more particularly a coil supplied with live steam, arranged in the water circulation jacket of the engine and opening into the cylinder.

It is known that in air compressors, it is necessary to inject water into the cylinders in order to prevent prejudicial heating of the cylinder walls and the piston packing or gaskets. It is therefore advantageous in order to obviate any danger to provide for automatic injection independently of the mechanic or driver.

The drawing shows an arrangement of this kind, applied to a steam air-compressor which becomes operative automatically when the driving engine is started.

A coil 2 communicates with a pipe 1 coming from any supply of live steam, such as the steam supply of the driving engine if the compressor is driven by a steam engine. This coil 2 is placed in an envelop formed by an enlarged portion 3 of the discharge

pipe 7, which communicates with the water circulation jacket 4 of the compressor and is preferably placed inside said jacket. This coil 2 is connected by a pipe 5 to the air cylinder 6.

The steam passing through the coil 2 is condensed, and is projected through the pipe 5 as a fine spray or in drops into the air cylinder on the suction stroke.

The improvement described above is applicable in a general manner to compressors, for air or other gases, and more particularly those used in connection with torpedoes.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In a compressor, the combination with the cylinder having a water circulation jacket, of a coil connected with a live steam supply, and with the cylinder, and means in connection with the water jacket for cooling the coil.

2. In a compressor, the combination with the cylinder provided with a water jacket, of a discharge pipe communicating with the jacket and provided with an enlarged portion, a coil adapted for connection with a live steam supply in the enlarged portion, and a pipe connecting the coil with the compressor cylinder.

In testimony whereof I have hereunto placed my hand at Fiume, Hungary, this first day of February, 1908.

ALBERT EDWARD JONES.

In the presence of two witnesses:

MILO CLEMENTY,
ANTON VALENCIZ.