To all whom it may concern:

Be it known that I, Joseph A. Steinmetz, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Protected Gas-Cylinders, of which the following is a specification.

My invention relates to improvements in portable gas cylinders and particularly relates to metal cylinders or containers used for holding oxygen, nitrogen and acetylene gases and the like. The object of my invention is to provide a protected cylinder which may be transported in trucks and other conveyances, by standing the cylinders on end, side by side, or in a horizontal position, one on top of the other, without noise due to the cylinders bumping together and striking each other; a further object of my invention is to utilize the protecting means upon the cylinders for lifting and handling the cylinders, thereby dispensing with the metal handles which have heretofore been used.

My improved protected gas cylinder is particularly adapted for the transportation of gas in time of war, when under cover of darkness or smoke screen, the battle line is stealthily advanced and silence is a vital necessity.

Likewise in making preparation for a gas attack it is necessary to bring up the containers silently and unobserved.

The present type of steel cylinders when loaded on a freight car or motor truck battery together and give out a loud clanking sound that can be heard by the enemy at a great distance in the still night and thus disclose the strategic location.

To prevent this danger it is highly desirable to arrange the gas cylinders with a noise shock preventive and this is accomplished by my invention, which provides a cheap, quickly arranged and sturdy separator between the cylinders, in the form of one or more rings or loops of resilient material, of themselves non-noise producing under shock or impact.

Referring to the drawing; Figure 1, is a perspective view of a gas cylinder provided with my improved protecting device and the representation of a man in the act of lifting the cylinder by utilizing the protecting device as handles; Fig. 2, is a side elevation of two protected cylinders, shown standing side by side; Fig. 3, is an end view of several cylinders provided with protecting devices and placed in a horizontal position, and Fig. 4, is a side elevation of a cylinder showing a modified form of the protecting device.

In the accompanying drawing in which like reference characters refer to like parts, 1 represents the gas cylinder and 2 represents the protecting device encircling the cylinder. The protecting device 2 may be of any non-resonant material which will separate the metal cylinders. In the drawing a piece of hemp rope 2 is shown as the protecting means. This material has been found in practice to be the most effective and the least expensive.

The coil of rope 2 loosely encircles the cylinder and the ends of the rope are spliced together as shown at 3. The enlargement in the rope, due to the splice 3, is an advantage as it tends to prevent the cylinder from rolling when in a horizontal position. The slack of the noise-preventing loops tends likewise to hold the cylinders from sliding endwise or rolling when stacked.

Each cylinder is preferably provided with two encircling coils of rope 2, one of which is located adjacent to the top and the other adjacent to the bottom of the cylinder. The coils of rope 2 are held in place upon the cylinders by keepers 5 which are attached to the cylinders by welding or brazing. Said coils of rope 2 are thus securely held in place upon the cylinders so that the coils may be conveniently used as handles for lifting the cylinders.

The rope may be coiled around the cylinder, as shown in Fig. 4, or in any similar manner, without departing from my invention.

Having thus described my invention I claim and desire to secure by Letters Patent:

1. A high pressure metal cylinder having a high sonorous quality, means rigidly attached to said cylinder, and a non-resonant member coiled loosely around the cylinder to form a handle and reduce the sonorous quality of the cylinder, said looseness permitting the insertion of the hand between the said member and the cylinder, the said non-resonant member being retained in place near its ends by the said means.

2. A high pressure metal cylinder having a high sonorous quality, means rigidly attached to said cylinder, and an endless band of non-resonant material loosely encircling said cylinder and retained in place by said
means, said looseness permitting the insertion of the hand between the cylinder and band.

3. The combination of a portable cylinder; a coil of rope having its ends joined together to form an enlarged portion in the said coil of rope and means for securing one or more of said coils of rope upon the cylinder to protect the latter and hold the cylinder from rolling when in a horizontal position.

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

JOSEPH A. STEINMETZ.

Witnesses:
FREDERICK M. BAUER,
M. B. MARTIN.