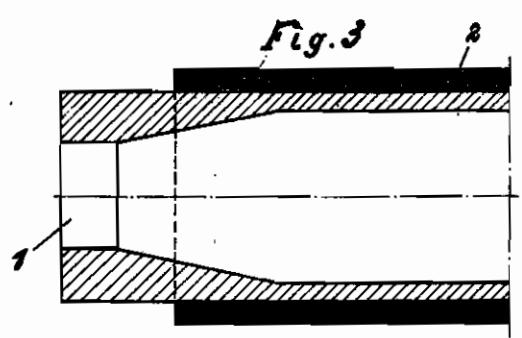
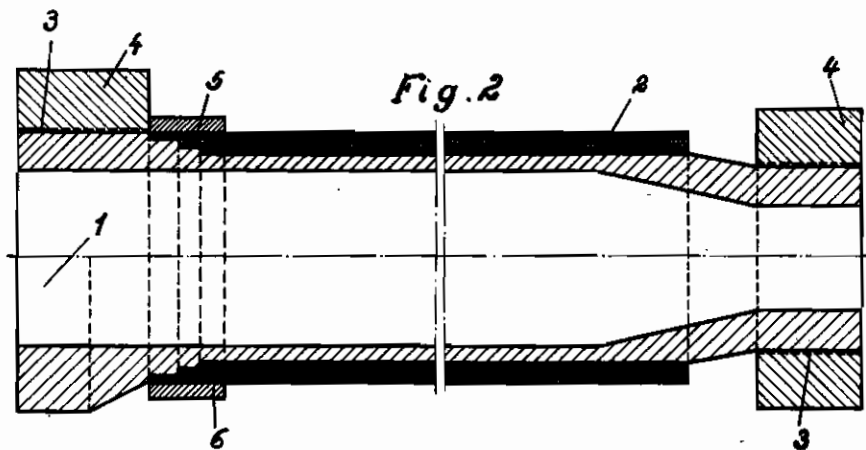
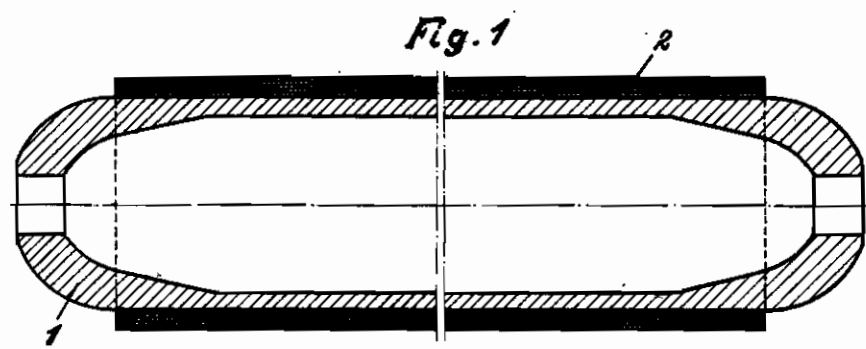


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# ALIEN PROPERTY CUSTODIAN

## HIGH PRESSURE CONTAINER

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Application filed November 14, 1939

In our application for patent Ser. No. 245,048 filed on the 10th of December 1938 a high pressure container is described which consists of a comparatively thin-walled solid base body, whose main portion is only strong enough to take up the longitudinal stresses, said main portion being made in one piece with the ends which are strong enough to take up the longitudinal and transverse forces, and whose main portion is strengthened for taking up the transverse forces by rolled-on layers of sheet metal plates welded together in the longitudinal direction.

The present invention relates to an improvement of the invention described in the main patent application in that it is proposed to obtain the strengthenings of the comparatively thin-walled solid base body thereby that layers of bands are tightly wound around the same. It is advisable, to shrink on them band layers in warm state, in order that by the shrinking stresses produced during the cooling pressure stresses are produced in the inner cylinder.

Several embodiments of the invention are illustrated by way of example in the accompanying drawing, in which

Fig. 1 shows a forged cylinder with several band layers wound around it.

Fig. 2 shows an arrangement, in which at the end of the forged cylinder a step-like change from the cylinder wall to the thickened head end is provided, and

Fig. 3 shows another construction of the head end.

A cylinder 1 forged according to the known method and flanged at the ends is covered with several band layers 2 wound around it (Fig. 1). These band layers are, for instance, shrunk on in order to produce preliminary pressure stresses in the forged cylinder wall. The band layers are applied on the base body in warm state.

The form of construction shown in Fig. 2 illustrates a forged cylinder 1, whose ends are either made as flanges or equipped with a screw thread 3, on which a flange 4 can be screwed. The end of the cylinder has a step-like transition from the cylinder wall to the thickened head, so that the band layers applied on to the cylinder bear each one against a vertical edge and thereby look as if they were completely covered. By the step-shaped transition 5 from the cylinder wall to the thickened head a favourable stress is attained in the transition portion. The uppermost band layers are secured in position by a ring 6 rolled over the same, welded-on and shrunk-on.

The head ends may be produced in the most various manner, such as shown in the Figs. 1 and 2 and also in the Fig. 3; other forms of construction are, however, possible.

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