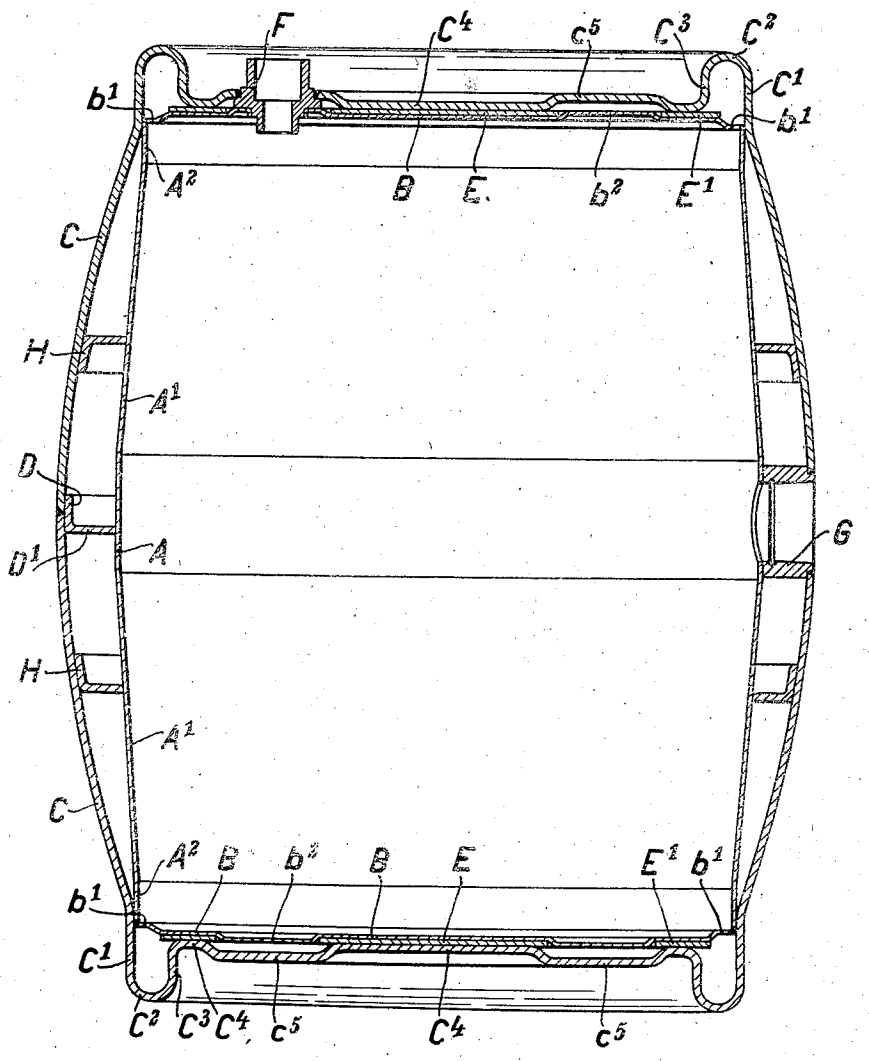
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METAL DRUM

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METAL DRUM

Application filed September 28, 1929, Serial No. 395,952, and in Germany October 27, 1928.

The invention relates to improvements in or modifications of metal drums of the type described in the specification of United States Letters Patent to J. Knigge, No. 1,800,082, April 7, 1931. The object of my present invention is to simplify the construction of metal drums of this type.

In order that the invention can be more readily understood, a preferred embodiment of the same is illustrated by way of example in the accompanying drawing in which a jacketed metal drum according to the invention is shown in longitudinal section.

The drum proper comprising an inner shell which is made of stainless steel and possesses a sufficient strength, comprises a short cylindrical central section A and two tapered portions A^1 which in their turn subside each into a short cylindrical portion A^2 at each extremity. Each of the latter has welded on it the appurtenant end wall B by means of an inward depressed edge portion b^1 which extends rectangularly to and the diameter of which corresponds to the internal diameter of portion A^2. Each end wall B is further provided with an annular outward depression b^2.

The jacket comprising an outer shell which is made of a cheaper material, e. g. mild steel, and has a notably greater wall thickness than the drum, consists of two pot-shaped halves which are slid on the drum from the ends. The shell portion C of the two halves of the jacket is of such a shape, that the jacket when assembled has a barreled shape. The two portions are butt jointed along the outer periphery of a ring D D^1 of angular cross section and are connected to one another and to the latter by welding along the leg D thereof. The leg D^1 of ring D D^1 abuts on the portion A of the drum but is not in connection thereto.

Each of the barreled portions C toward its outer extremity subsides into a cylindrical portion C^1 the diameter of which is so chosen that the cylindrical portion A^2 of the drum tightly fits therein. The portion C^1 subsides into a bead C^2 formed by bending the wall 180 degrees with a large radius, which bead passes over into a short cylindrical portion C^3 directed toward the drum. The portions C^1 C^2 C^3 form a rim of U-shaped cross section which due to the large radius of the middle portion C^2 that interconnects the legs C^1 C^3, is resilient. The portion C^3 passes over into the end wall C^4 which above the depression b^2 of the end wall B of the drum proper has an annular outward depression c^5 of such a depth that a space exists between the depressions b^2 and c^5. Radially inside and outside the annular depressions b^2 and c^5 the walls B and C^4 are separated by inserted sheets of pressboard, or any other material of low heat conductivity which is somewhat elastic but has sufficient strength. The inner circular pressboard sheet surrounded by the depression b^2 is denoted by E and the outer, annular sheet by E^1. The depression b^2 secures the sheets E and E^1 against radial displacement.

The drum is fitted in the usual manner with a spile hole socket F and a bung hole socket G. In the range of the latter the angle ring D D^1 is interrupted and in the range of both sockets the jacket is provided with suitable apertures. Each shell half C of the jacket has welded on it a reinforcing angle ring H which like the ring D D^1 abuts on the drum but is not connected thereto. Through the intermediary of the sheets E E^1 the drum is firmly held by the jacket in the longitudinal direction the drum being prevented from loosening in the jacket even after long use owing to the rim C^1 C^2 C^3 of the jacket being resilient.

In manufacturing the described drum the drum proper with the socket F and G is manufactured first. Thereupon the two halves of the jacket are slid onto the drum, after previously the rings H have been welded onto the two halves and ring D D^1 onto one of them. Then the two halves are welded together and onto ring D D^1, during which operation they are pressed to one another from outside in longitudinal direction, so as to firmly abut on the drum proper during welding.

By welding, finally, the sockets F and G onto the jacket the manufacture of the described drum is terminated.

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

1. A metal drum consisting of a drum proper having end walls and a substantially cylindrical shell, and of a jacket having end walls too and a barreled shell, the jacket consisting of two pot-shaped halves, with the shell portion of each of said pot-shaped halves subsiding into the respective end wall by a substantially U-shaped rim of abundant curvature, the drum proper being constructed as a unit independent of said jacket and firmly held within said jacket solely by the extremities of the shell of said drum proper abutting on the extremities of the shell of said jacket and the end walls of the drum proper abutting on the end walls of the jacket whereby the end walls of the drum proper are substantially protected from being bellied.

2. A metal drum consisting of a drum proper having end walls and a substantially cylindrical shell, said drum proper slightly tapering from the midst toward both ends with said tapering portions subsiding each into a short cylindrical portion at the extremities of said drum, and of a jacket having end walls too and a barreled shell, the jacket consisting of two pot-shaped halves, the drum proper being constructed as a unit independent of said jacket and firmly held within said jacket solely by the extremities of the shell of said drum proper abutting on the extremities of the shell of said jacket and the end walls of the drum proper abutting on the end walls of the jacket whereby the end walls of the drum proper are substantially protected from being bellied.

The foregoing specification signed at Cologne, Germany, this 14th day of September, 1929.

PETER WOLF.