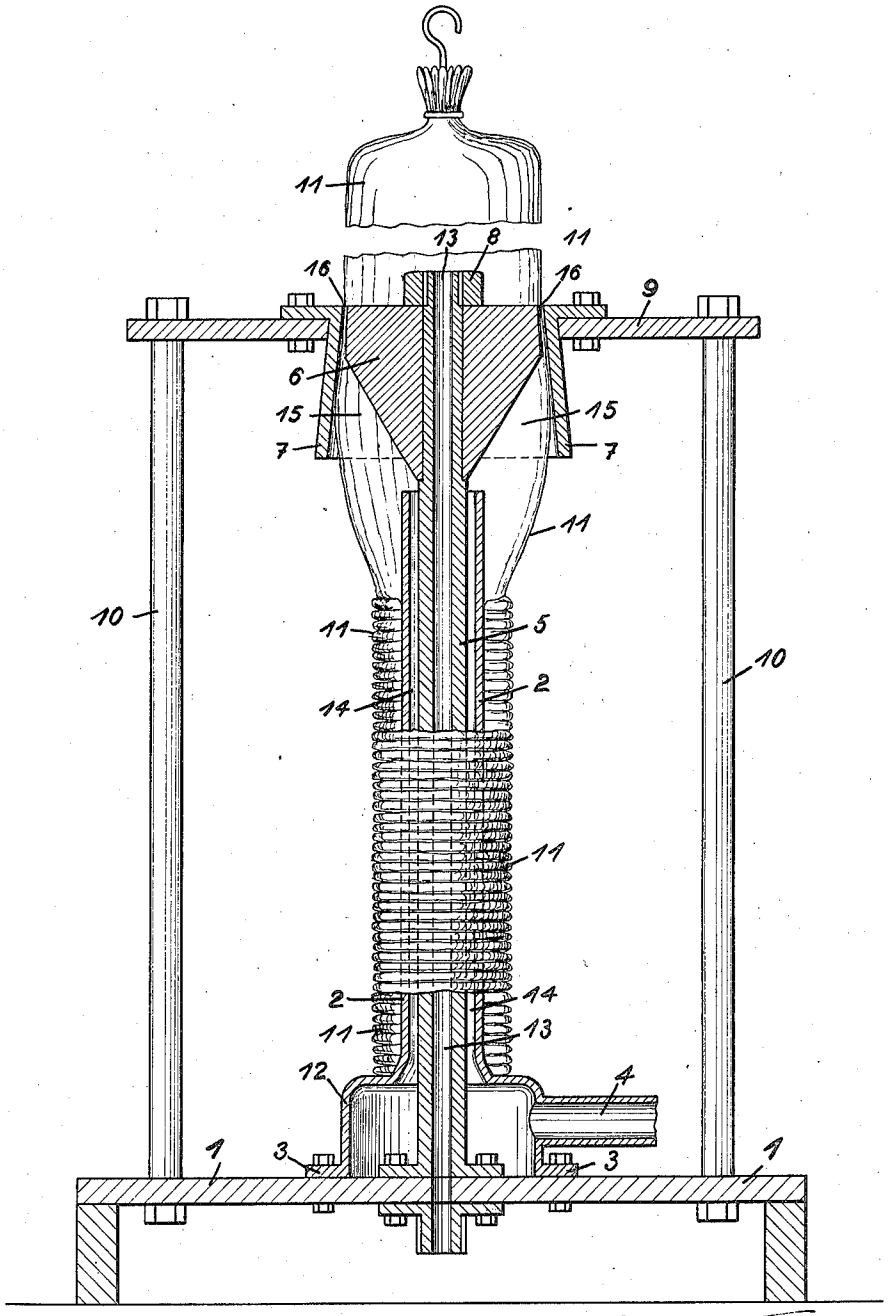
July 26, 1938. G. HUCKFELDT ET AL 2,125,025

PROCESS OF PRODUCING ARTIFICAL SAUSAGE SKINS

Filed Nov. 3, 1937



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Patented July 26, 1938 2,125,025

UNITED STATES PATENT OFFICE

2,125,025

PROCESS OF PRODUCING ARTIFICIAL SAUSAGE SKINS

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Application November 3, 1937, Serial No. 172,633
In Germany July 21, 1936

1 Claim. (Cl. 99—178)

This invention relates to a process of producing artificial sausage skins.

Artificial sausage skins consisting of a seamless fabric tube made for instance of natural silk and saturated with a subsequently hardened mass of comminuted fibers of animal tissue are known. However, as the fabric tube wound upon a mandrel is saturated in a bath of animal tissue fibers swelled up in water, only thin solutions of this mass which possesses great swelling capacity can be used with the result that the skins produced are correspondingly weak and have little resistance.

Furthermore, it is difficult to prevent the inner wall of the tube from sticking together during drying, and the introduction of rings or rods into the tube for preventing this and their subsequent removal are bothersome operations. This practice, moreover, easily causes damage to the skins and during hardening of the latter involves less contraction at the places where the rings or rods have been inserted. Another drawback is that such skins do not possess sufficient resistance to withstand inflation and will be destroyed or lifted off from their fabric support at slight pneumatic pressure.

The invention overcomes these difficulties by applying a thick paste of plastic consistency to the inner wall of the fabric tube instead of saturating the tube from without with a relatively thin solution as in the prior practice referred to above. The mass to be applied passes within an annular nozzle to the inner wall of a fabric tube guided by the nozzle and tied at the top whilst simultaneously the portion of the fabric tube being treated is subjected from within to strong air pressure so as to force the mass, from within the fabric tube, into the meshes of the fabric, to close them and to inflate the treated portion to tautness. The artificial casing thus produced is preferably kept taut until it is completely dried to prevent portions of the wall from sticking together. The plastic mass to be applied preferably consists of a swelling of comminuted portions of animal tissue having a dry content of 2% to 25%.

It is known to employ a core supplied with a fabric cover for molding seamless artificial cases of a mass consisting of animal or vegetable albuminous substances without a fabric insertion, but the mass is not permitted to penetrate the meshes of the fabric cover and to adhere to the threads of the fabric, as the cover is detached from the molded mass after drying. It is also known to produce sausage skins of regenerated cellulose or a cellulose derivative sensitive to water the inside of which is covered with a layer of gelatin or gelatinous substances. The actual sausage skin consists of cellulose having an inner coating and is swelled with gas under pressure to dry the coating. In contradiction to this method, the skin according to the invention is molded from the mass applied and the thin tubular external fabric serves as support.

By way of example, the invention is illustrated in the accompanying drawing which shows an elevation, partly in section, of a device adapted for carrying out the process according to the invention.

Referring to the drawing, 1 is the base plate to which the vertical mass supplying pipe 2 is secured by the flange 3. The lower portion 12 of the pipe 2 is expanded and connected with the inlet pipe 4 leading to a press, not shown. Inside the pipe 2 a core holder 5, also secured to the base plate 1, is provided and possesses a bore extending through its entire length to form the channel 13 which serves as passage for compressed air. Between the inner circumference of the pipe 2 and the outer circumference of the core holder 5 a free annular space 14 opens into a nozzle comprising the core 6 and the nozzle ring 7. The core 6 resembling a truncated cone is attached to the holder 5 and held in position by the check nut 8. The nozzle ring 7, also of truncated conical shape, is arranged on the top plate 9 which is supported by the stay bolts 10. The top plate 9 and the nozzle ring 7 can be readily removed to facilitate winding of the fabric tube 11 upon the pipe 2.

To produce an artificial sausage skin the mass is fed to the pipe 2 by the pipe 4 and distributed within the lower expansion 12 thereof. The mass is then forced through the annular space 14 and on emerging from the mouth thereof passes into the space 15. Between the inner wall of the ring 7 and the core 6 an annular gap 16 is formed through which the fabric tube 11 wound upon the pipe 2 and tied on top is drawn. From the mouth of the annular space 14 whence it emerges and wherein it spreads out the mass passes to the inner wall of the tube 11 and is uniformly applied thereto while the tube 11 is being drawn through the annular gap 16 produced by the core 6 and the nozzle ring 7. Simultaneously, compressed air is blown through the channel 13 of the core holder 5 to insure tautness of the treated portion of the fabric of the tube 11 and to force the mass applied to the inner wall into the meshes and pores thereof.

We claim:—

A process of producing artificial sausage skins, consisting in applying a pastelike mass of undissolved comminuted proteinaceous animal tissue having a dry content of at least 2% to the inner wall of a fabric tube, forcing the mass into the meshes of the fabric by compressed air acting inside the tube and simultaneously insuring taut inflation of the portion of the tube coated with paste-like mass, said tube being kept closed at its end.

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