

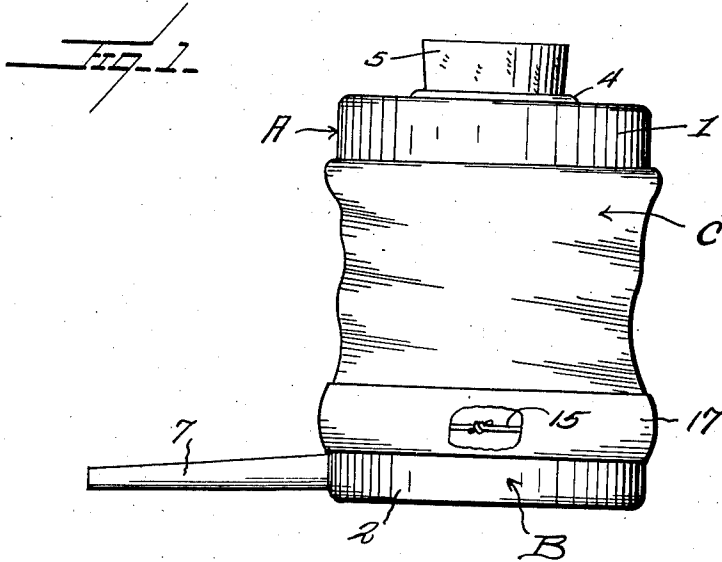
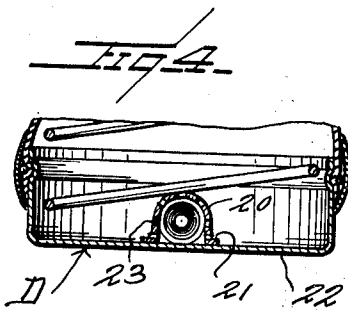
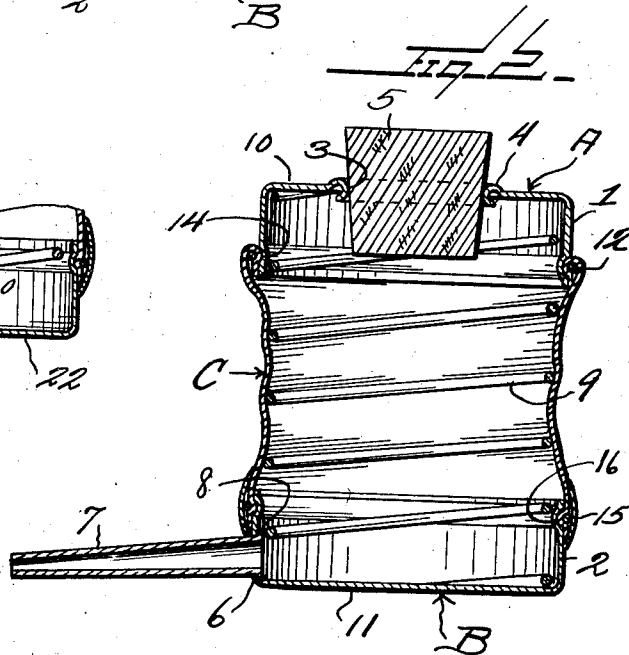
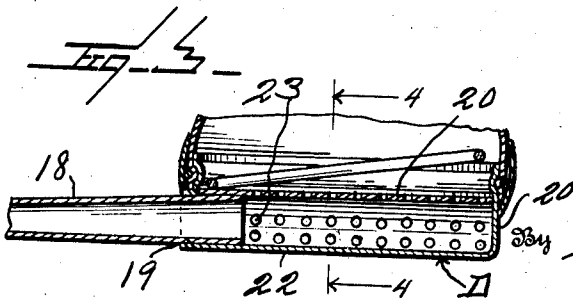
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POWDER GUN

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POWDER GUN

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This invention relates to a powder gun, and it is an object of the invention to provide a gun of this kind comprising a top and bottom member having means interposed therebetween for urging said members one from the other and wherein the bottom member carries an outwardly disposed spout.

It is also an object of the invention to provide a device of this kind including a top member and a bottom member connected by a flexible side wall, together with a coiled spring interposed between the top and bottom members operating to urge said members one away from the other, one of said members being provided with a filling opening and the other of said members carrying an outwardly directed discharge spout.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved powder gun whereby certain important advantages are attained, as will be hereinafter more fully set forth.

In order that my invention may be better understood, I will now proceed to describe the same with reference to the accompanying drawing, wherein:

Figure 1 is a view in side elevation, with a portion broken away, of a powder gun constructed in accordance with an embodiment of my invention.

Figure 2 is a vertical sectional view taken substantially radially through the device as illustrated in Figure 1.

Figure 3 is a fragmentary sectional view illustrating a gun constructed in accordance with another embodiment of my invention, and

Figure 4 is a sectional view taken substantially on the line 4—4 of Figure 3.

As disclosed in the accompanying drawing, A denotes a top member and B a bottom member, each being formed of metal or other suitable material possessing requisite strength and resilience. These members A and B are cup-like and the side walls 1 and 2 respectively are inwardly disposed and are relatively short.

The member A at its central part is provided with a relatively large filling opening 3 and the marginal portion of the member A defining said opening 3 is formed to provide a rounded bead 4 to facilitate the application or removal of the closure plug 5 or cork or other preferred material.

The bottom member B is provided in its side wall 2 with an opening 6 through which is inserted from within an elongated tapered discharge spout 7. The inner or larger end of the

spout 7 is provided with a surrounding flange or bead 8 which has close contact with the inner face of the side wall 2 of the bottom member B. The inner or larger end portion of the spout 7 tightly wedges within the opening 6. However, to further hold the spout 7 in applied position, solder or the like may be employed and applied at both sides of the side wall 2.

The members A and B are connected by a cylindrical side wall C of red rubber or other flexible cloth or material. Interposed between the members A and B is a helical spring 9 herein disclosed as comprising six coils. One end portion of this spring 9 is snugly received within the member A and has contact with the head 10 thereof while the opposite end portion of the spring 9 is snugly received within the member B and has contact with the head 11 thereof.

This spring 9 has each of its coils of a diameter substantially equal to that of the members A and B and said spring 9 is of sufficient tension to constantly urge the members A and B one away from the other for a maximum distance determined by the length of the cylindrical side wall C. It will also be noted that the coils of the spring 9 are of such diameter as to maintain the side wall C distended at all times to assure proper discharge out through the spout 7 when pressure is imposed upon the members A and B or either of said members.

In assembling the device, the member A with its head 10 innermost is inserted within an end portion of the cylindrical side wall C and said end portion of the cylindrical side wall C is securely held to the side wall 1 of the member A adjacent the outer end portion thereof by an encircling strand 12, preferably wire, and which strand forces the adjacent portion of the side wall C within a surrounding groove 14 pressed in the side wall 1 of the member A. After this securing of the cylindrical side wall C to the member A, said cylindrical side wall C is turned inside out so that the major portion of this side wall C will extend beyond the free end of the side wall 1 of the member A. The spring 9 is then applied, after which the bottom member B has its side wall 2 inserted within the end portion of the side wall C remote from the member M.

This side wall C is securely held to the side wall 2 of the member B by an encircling strand 15 of wire or the like, which strand 15 tightly presses the adjacent portion of the side wall C within a surrounding groove 16 pressed in the side wall C of the member B adjacent the outer end thereof. After this connection between the

member B and the side wall C, a band 17, preferably of rubber, is applied around the end portion of the side wall C connected to the side wall 2 of the member B to conceal the strand 15 and thereby improve the appearance of the gun and at the same time to provide further means for maintaining the desired connection between the side wall C and the member B.

In the embodiment of the invention as illustrated in Figures 3 and 4, the bottom member D of the gun is provided with means to avoid lumping of the powder when discharged out through the spout 18. This spout 18 is also tapered and is inserted from within out through an opening 19 provided in the side wall 20 of the member D. The inner or larger end portion of the spout 19 extends a distance inwardly of the member D and said inserted end portion is tightly straddled by an end portion of a filtering member 20 within the member D and extending radially thereacross.

This member 20 is of metal or other suitable material possessing sufficient rigidity and, as illustrated in Figure 4, is substantially in the form of an inverted U with its longitudinal edges provided with the outwardly disposed flanges 21 to facilitate soldering of the member 20 to the head 22 of the member D. This member 20 is provided with the perforations 23 of a size to allow powder to readily pass therethrough but to filter out or hold back any lumps. This member 20 also has a tendency to break up the lumps within the powder when the powder content is under pressure.

From the foregoing description it is thought to be obvious that a powder gun constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated.

What is claimed is:

1. A powder gun comprising a top member having a side wall, a bottom member having a side wall, the side wall of one member being disposed toward the side wall of the second member, a flexible tubular side wall interposed between the top and bottom members, the side walls of said members extending within the opposite end portions of the tubular side wall, one end portion of the tubular side wall being inwardly reverted, a flexible strand surrounding said reverted portion for clamping the same to the side wall of one of the members, said strand being between the reverted portion and the side wall proper whereby said strand is entirely concealed, a flexible strand encircling the opposite end portion of the tubular

side wall for anchoring the same to the side wall of the second member, a coiled spring interposed between the top and bottom members, the tubular side wall surrounding said spring, and a spout carried by one of the members and extending out through the side wall thereof.

2. A powder gun comprising a top member having a side wall, a bottom member having a side wall, the side wall of one member being disposed toward the side wall of the second member, a flexible tubular side wall interposed between the top and bottom members, the side walls of said members extending within the opposite end portions of the tubular side wall, one end portion of the tubular side wall being inwardly reverted, a flexible strand surrounding said reverted portion for clamping the same to the side wall of one of the members, said strand being between the reverted portion and the side wall proper whereby said strand is entirely concealed, a flexible strand encircling the opposite end portion of the tubular side wall for anchoring the same to the side wall of the second member, a coiled spring interposed between the top and bottom members, the tubular side wall surrounding said spring, a spout carried by one of the members and extending out through the side wall thereof, and a band tightly surrounding said opposite end portion of the tubular side wall and the side wall of the associated end member and covering the second mentioned strand.

3. A powder gun comprising two circular members each having a surrounding side wall, the members being arranged with the edges of the side walls in opposed relation, a flexible tubular side wall extending between and connected at its ends to the side walls of the circular members, the side wall of one circular member having an opening therethrough, an elongated screen element of substantially U-shaped cross section disposed across the said one circular member and secured between opposite sides of the side wall thereof, one end of said screen being aligned with said opening and the said screen being disposed with its open side opposed to the adjacent circular member and in contact therewith, a tubular discharge spout having an end inserted through said opening into and firmly secured in the adjacent end of the screen member, and a coiled spring within and extending through the flexible tubular side wall and bearing at one end upon the screen member and having its other end engaged in the opposite circular member.

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