

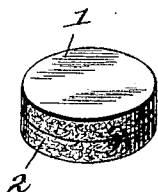
Jan. 15 , 1924.

1,480,595

C. S. BIRD

WAD FOR SHOT SHELLS OR CARTRIDGES

Filed March 3, 1920



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UNITED STATES PATENT OFFICE.

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WAD FOR SHOT SHELLS OR CARTRIDGES.

Application filed March 3, 1920. Serial No. 363,040.

To all whom it may concern:

Be it known that I, CHARLES S. BIRD, a citizen of the United States, residing at East Walpole, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Wads for Shot Shells or Cartridges, of which the following is a specification.

My present invention pertains to an improved wad for shot shells or cartridges.

Wads as commonly made for shot shells are produced from so-called felt paper or fibrous stock of various characters, being, as a rule, provided with a facing of paper upon both sides to produce a finish and a surface which is to a certain degree less absorbent than the body.

The present invention has for its object the production of a wad, which, to a greater or less extent, is waterproof, and which, by reason of its construction, does away with the necessity of providing the covering faces of paper. By reason of the construction of the paper from which the wads are produced the tools which are employed are, to a greater or less extent, lubricated in the act of punching or dieing out the wads from the stock, thus increasing the life of the tools. Moreover, the cost of the production of the wad is materially decreased, it being found that a wad produced in accordance with the present invention is about one-half the cost of producing the old type of wad above referred to.

A wad forming the basis of the present invention is shown in the annexed drawing the wad being shown in perspective and wherein it will be noted that it is formed of a plurality of layers or thicknesses of an easily compressible paper, (preferably felt paper), the layers being designated by 1 and 2, and secured together by glue or other suitable adhesive. The outermost or exposed faces of the two layers will be waterproofed, as with paraffine wax, or some equivalent waterproofing material which, in addition to its waterproofing effect, tends to lubricate the die or punch as it is forced through the sheet in the act of cutting out the wads, thereby materially prolonging the life of the tool. It has been found in actual tests that the external waterproofing of the outermost faces of the stock from which the wads are cut, produces wads which are sufficiently

waterproofed to prevent, to a greater or less degree, moisture from reaching the powder when the wad is placed in the shell.

While it is preferred to coat both of the exterior faces of the material from which the wad is formed, it is conceivable that only one face need be waterproofed and that such face will be exposed to the cutting action of the die so that the die will be lubricated, as above noted, in the act of cutting.

It will be understood that while I have shown only two plies of compressible paper, as entering into the body of the wad, that a greater number may be employed. The number utilized will, of course, be dependent upon the thickness of the plies and the ultimate thickness of the wad which may be desired, and likewise the degree of compressibility which may be necessary or desirable.

What is claimed is,—

1. A wad for shot shells or cartridges comprising a plurality of plies of compressible paper secured to each other by a suitable adhesive with the external faces of the outermost plies waterproofed.

2. A wad for shot shells or cartridges comprising a plurality of plies of compressible paper secured to each other by a suitable adhesive with the external faces of the outermost plies treated with paraffine wax.

3. A wad for shot shells or cartridges comprising a plurality of plies of compressible paper secured to each other by a suitable adhesive with the external faces of the outermost plies treated with waterproofing material of a lubricating nature.

4. A wad for shot shells and the like, comprising a body formed of compressible paper with the outermost faces thereof paraffined.

5. A wad for shot shells and the like, comprising a body formed of compressible paper with at least one of its outermost faces waterproofed.

6. A wad for shot shells or cartridges comprising a plurality of plies of compressible paper secured to each other by a suitable adhesive, said wad having at least one of its outermost faces waterproofed.

In testimony whereof I have signed my name to this specification.

CHARLES S. BIRD.