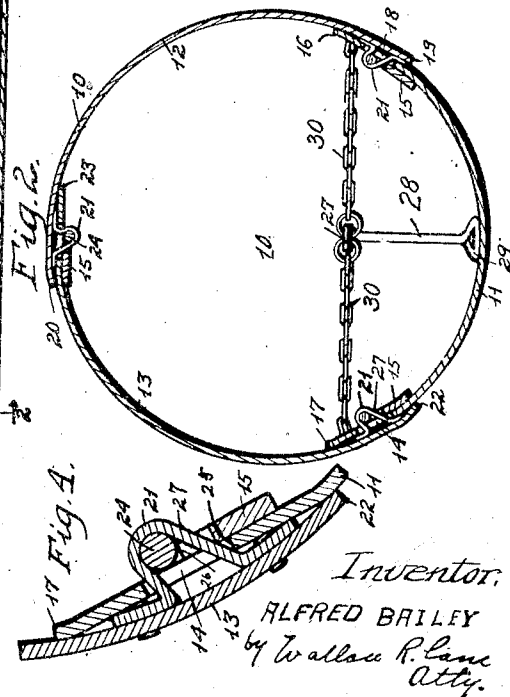
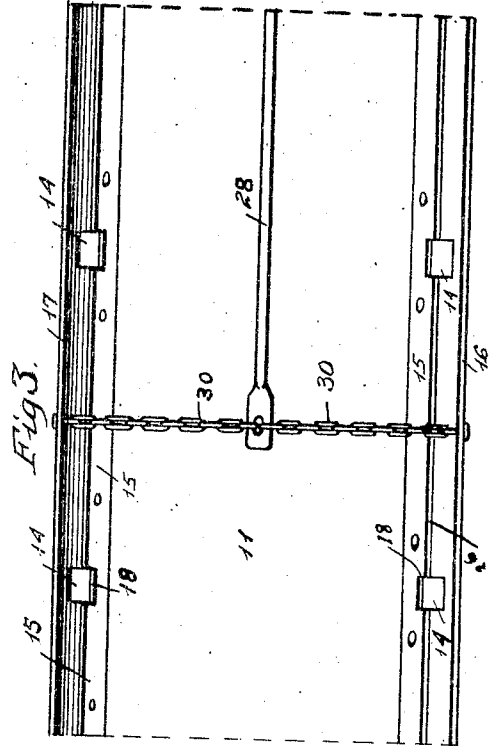
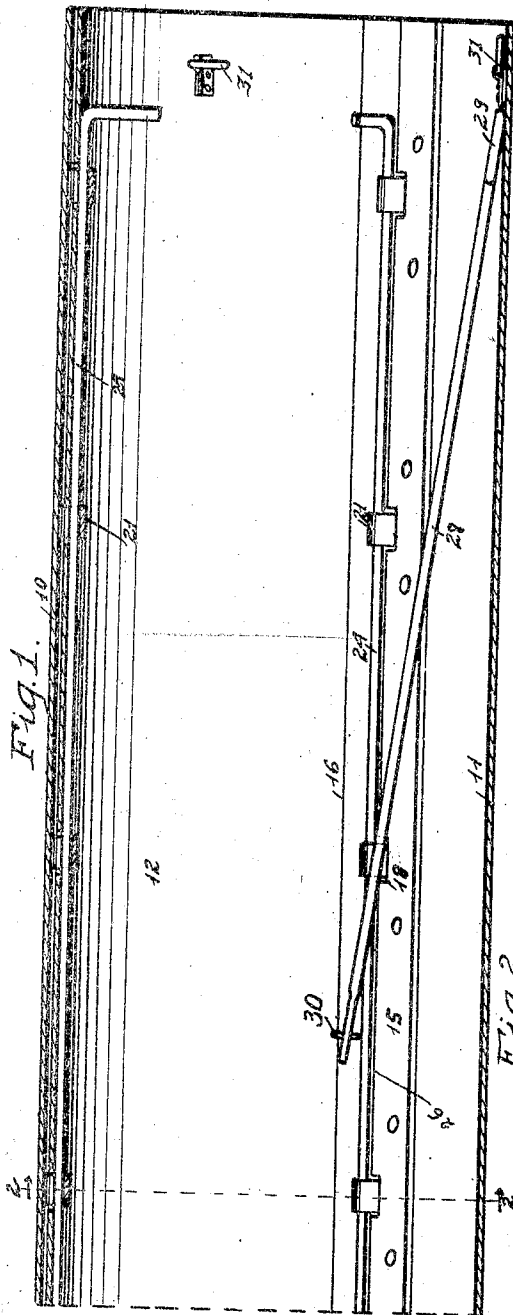


1,058,526.

Patented Apr. 8, 1913.



Witnesses:
 Clarence J. Souter
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Inventor:
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UNITED STATES PATENT OFFICE.

ALFRED BAILEY, OF AREDALE, IOWA.

CULVERT-MOLD.

1,058,526.

Specification of Letters Patent.

Patented Apr. 8, 1913.

Application filed November 20, 1911. Serial No. 661,219.

To all whom it may concern:

Be it known that I, ALFRED BAILEY, a citizen of the United States, residing at Aredale, in the county of Butler and State of Iowa, have invented a new and useful Improvement in Culvert-Molds, of which the following is a specification.

The object of my invention is to improve the construction of molds for cement culverts; and to provide a simple, inexpensive and efficient mold, adapted to be easily and quickly collapsed and removed, after the culvert has been molded.

One feature of my invention consists in the provision of a mold formed of two cylindrical sections so that the mold can be collapsed and removed from either end after the culvert is formed.

Another feature which characterizes my invention, resides in the provision of means for drawing the walls of the mold inwardly, or away from the cement formed culvert, thus greatly facilitating the collapsing and removing of the mold after the culvert is molded.

The above and other objects and advantages of my invention will become apparent from the detail description of the accompanying drawings, in which—

Figure 1 is a central longitudinal sectional view of one section of my improved collapsible culvert mold, Fig. 2 is a transverse sectional view taken on the line 2—2 of Fig. 1, Fig. 3 is a detail view of a portion of one of the sections, illustrating the means for drawing the walls inwardly and away from the culvert formed, Fig. 4 is an enlarged detail view of the means for joining the shell portions of the sections together.

My collapsible culvert mold consists of two cylindrical sections joined together by inserting the contracted end of one section into the flared end of the adjacent section. I have only shown one section in the drawings, but since both sections are alike in construction, save for the contracted and flared end, a detail description of one is sufficient for both.

Referring to the drawings in detail, 10 designates a cylindrical section constructed of sheet metal (or other suitable material) consisting of three shell portions 11, 12 and 13. The shell portion 11 is provided near its longitudinal edges 16 and 17, with a series of openings 14, disposed in align-

ment, and longitudinal bars 15, said bars being secured on its inner face by rivets or other suitable means. The bars 15 extend past the openings 14 a short distance, as best shown in Fig. 4, and are provided with slots 18, corresponding in arrangement with the openings 14, for a purpose presently to be described. The shell portion 12 is provided on its inner face, near its longitudinal edges 19 and 20, at intervals with inwardly projecting loops 21, adapted to pass through the openings 14. The shell portion 13 is provided on its inner face near the longitudinal edge 22, with inwardly projecting loops 21, arranged in alinement and adapted to pass through the openings 14, in the shell portion 11. The shell portion 13 is also provided, near its longitudinal edge 23, with a series of openings 14 disposed in alinement, and a longitudinal bar 15, said openings being adapted to receive the loops 21 on the shell portion 12. The bar 15 is secured to the inner face of the shell portion 13, and is provided with slots 18, corresponding in arrangement with the openings 14. The shell portions are joined together by keys 24, passing through the aligned loops.

I provide my mold on the interior with means for drawing the walls of the mold inwardly, for the purpose of releasing and disengaging the mold from the cement after the culvert is formed, which consists of a rod 28, extending inwardly into the sections any desired distance, and provided at its outer end with a handle 29. It is attached at its inner end to the longitudinal edges of the shell portion 11, by means of chains 30, or other similar means, which chains are attached, by any suitable means, at one end to the rod 28, and at the other end to the interior surface of the shell portion 11, near its longitudinal edges 17 and 18. It will readily be seen that a series of chains placed at intervals, may be used for connecting the rod 28 and the shell portion 11; therefore, I do not wish to limit myself to the specific construction shown.

After the culvert is formed, and it is desired to remove the mold, the rod 28 is turned by the handle 29, which operation winds the chains on the rod, thus drawing the walls of the mold inwardly and away from the cement formed culvert; thereby greatly facilitating the collapsing and removing of the mold.

I also provide my mold on the interior

with handles 31, to facilitate the removing of the mold.

It will be noticed that the longitudinal bars 15 extend a short distance past the edge 25, of the openings, and are provided with a series of slots 18, corresponding with the openings 14, presenting a longitudinal bearing surface 26, above the edge 25 of the openings 14, for the key 24, thus releasing the loops from a great strain which they are subject to, and preventing them from being broken or torn loose. It will also be noticed that the loops taper inwardly on one side, presenting an inclined surface 27 (as best shown in Fig. 2), whereby the overlapped portions of the section will readily disengage without binding, when the key is withdrawn.

While I have herein shown only one specific embodiment of my invention, it is to be understood that various changes and alterations may be resorted to by those skilled in the art, without departing from the scope of

the invention as defined in the appended claim.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

A culvert mold, comprising a cylindrical collapsible section, said section comprising a plurality of shell portions, means for joining said portions together, said means comprising openings in said portions and designed to receive loops secured to the adjacent portions, a key designed to be inserted through said loops and longitudinal bars secured to said portions, and so arranged as to present a bearing surface for said key.

In witness whereof, I hereunto subscribe my name this 11th day of October, A. D., 1911.

ALFRED BAILEY.

Witnesses:

RAILSTON POTTER,
GEO. ILGENFUTZ.