J. B. JARMIN.

METAL CULVERT PIPE.

APPLICATION FILED JAN. 23, 1909.

951,279.

Patented Mar. 8, 1910.

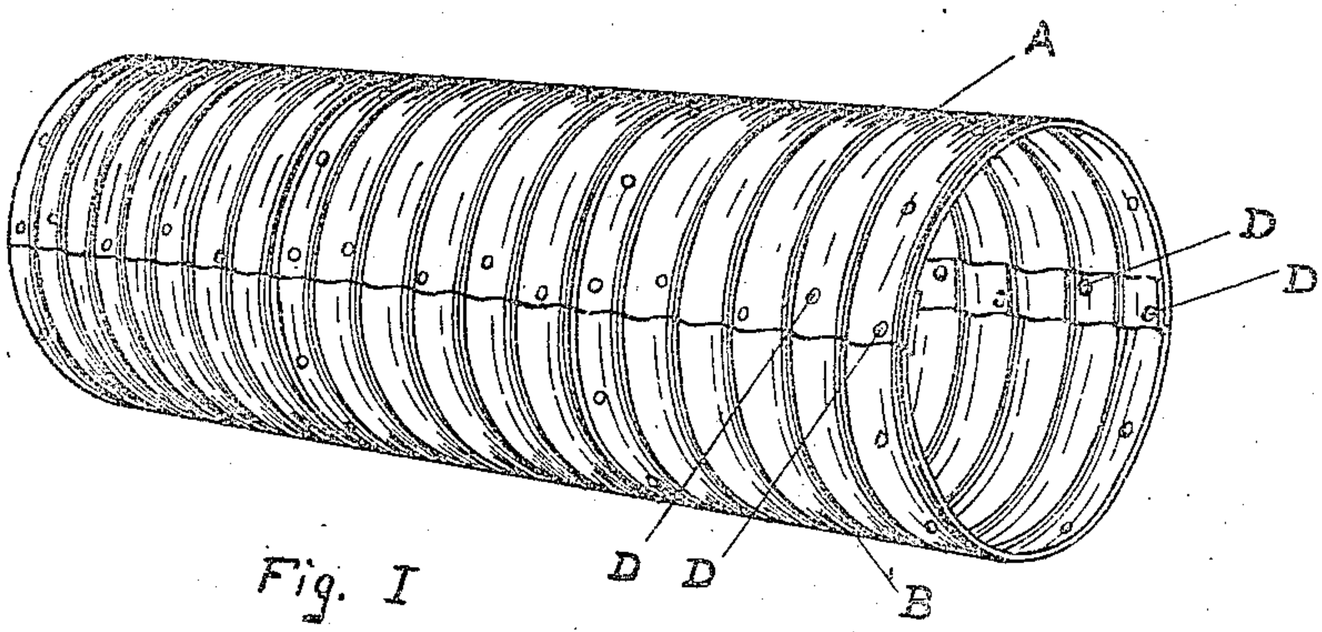

Fig. I

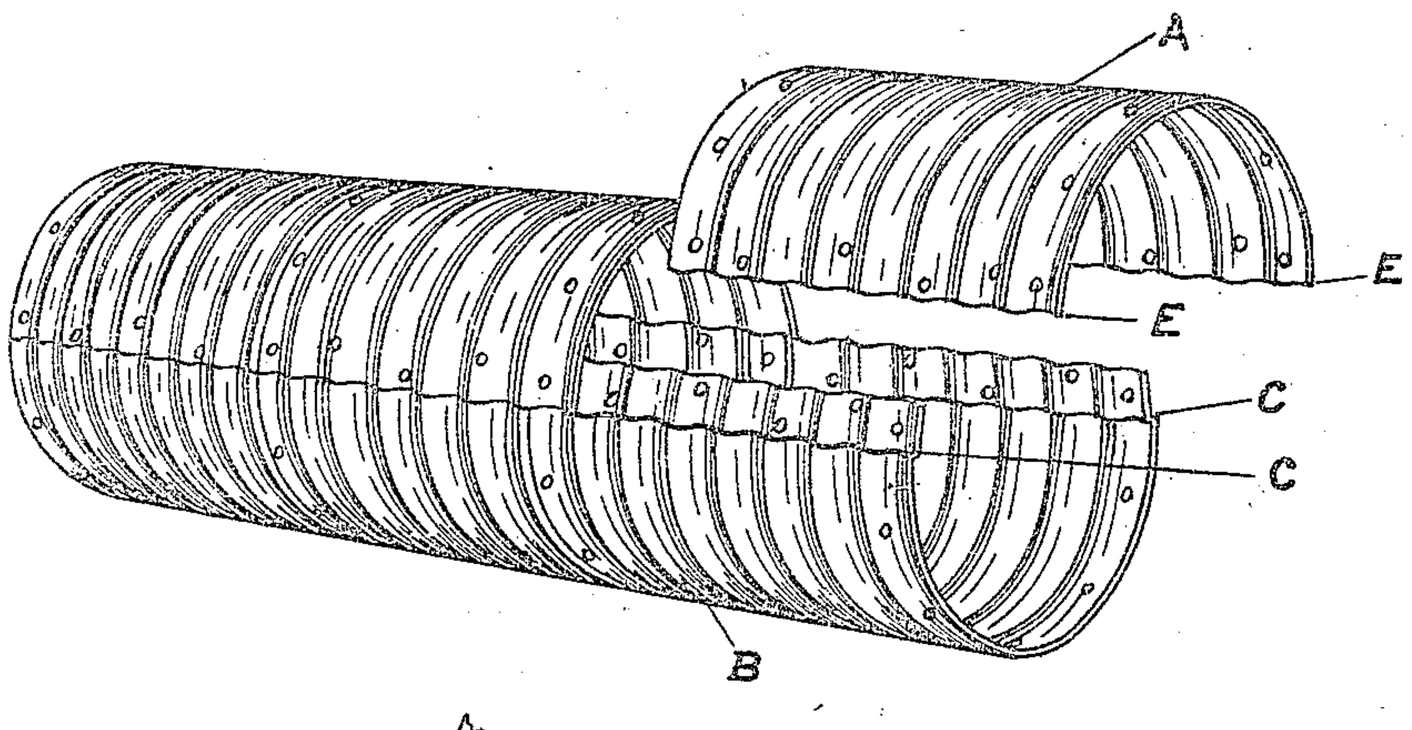

Fig. II

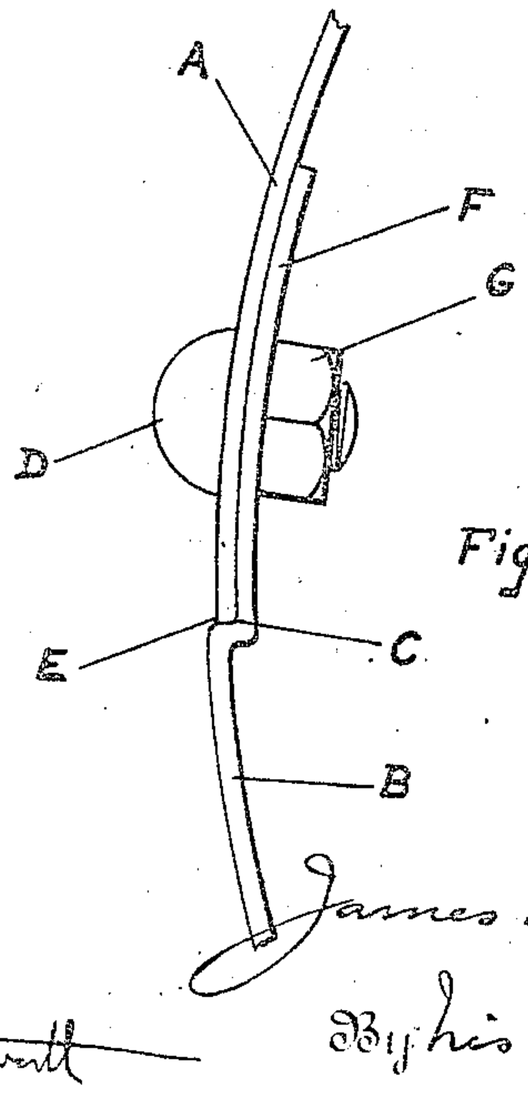

Fig. III

Witnesses
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UNITED STATES PATENT OFFICE.

JAMES B. JARMIN, OF SPOKANE, WASHINGTON, ASSIGNOR OF ONE-HALF TO JOHN S. BEALL, OF PORTLAND, OREGON.

METAL CULVERT-PIPE.

951,279 Specification of Letters Patent. **Patented Mar. 8, 1910.**

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To all whom it may concern:

Be it known that I, JAMES B. JARMIN, a citizen of the United States, residing at 1908 Broadway avenue, in the city of Spokane, county of Spokane, State of Washington, have invented a new and useful Metal Culvert-Pipe, of which the following is a specification.

This invention relates to metal culverts for use under many different circumstances and conditions and the objects of the invention are to provide a knock down metal culvert which can be transported to the place at which it is to be used and there set up and placed in position giving the same results that a solid metal pipe would give.

A further object is to provide a metal culvert composed of an upper and lower section so arranged that the lower edges of the upper section will rest on suitable shoulders near the upper edges of the lower section, the said sections then being suitably fastened together and, when so fastened, forming a metal culvert pipe without projections and of proper cylindrical construction that can be properly set in place and tamped into position.

A further object is to provide a metal culvert pipe consisting of an upper and lower section that can be so assembled on the ground as to be water tight and fill all the requirements of a solid metal pipe.

I attain these objects by the novel composition and arrangement of parts as hereinafter fully described and illustrated in the accompanying drawing in which:—

Figure I is a side and end view of a portion of assembled pipe. Fig. II shows a portion of the pipe already assembled and a portion of the top half of the pipe ready to be placed in position over the corresponding lower half. Fig. III shows a detailed cross section of the joint connecting the two halves of pipe.

Similar letters refer to similar parts throughout the several figures.

The pipe may be constructed of any suitable metal either plain or corrugated and has a general cylindrical form as shown in Fig. I.

"E" is the lower edge of the upper half "A" and rests directly upon offset or shoulder "C" on lower half "B" thus, any downward pressure upon top half "A" is transmitted directly to lower half "B" instead of falling upon the rivets, bolts or other means used to fasten the two halves together such as bolts "D". Any danger of shearing of fastenings is thus avoided and a flush joint on the outside is obtained as shown in Fig. III.

Bolts "D" may be used to join together the two halves "A" and "B" or rivets or any other suitable method of fastening may be used. "F", the portion of lower half "B" above the shoulder "C", when pipe is assembled, is inside said pipe, thus leaving the outside of pipe smooth and free from all projections so that nothing will prevent proper tamping of filling material about said pipe, or the process may be reversed and the same results obtained by having lower edges of top section "A" inside top edges of lower section "B" with offsets or shoulders to correspond.

If corrugated pipe is used as is shown in Figs. I and II the corrugations are continuous and need not be dispensed with at joints, thus giving a corrugated pipe its full strength instead of weakening the same.

Top section "A" need not be placed in position directly over a corresponding lower section "B" but may be so placed or disposed that the circular or vertical joints will be broken. This will give greater strength to the pipe, if desired, and by the use of a short semi-circular section at each end of an assembled pipe the ends thereof will be left as even and regular as the ends shown in Fig. I.

My claims are as follows:

1. A metal culvert pipe consisting of upper and lower sections, said lower section being provided with a depression on each side thereof forming a shoulder, said shoulder being adapted to support said upper section, substantially as and for the purpose described.

2. A metal culvert pipe consisting of upper and lower sections, shoulders formed integrally with both sides of said lower sections, said shoulders being adapted to support said upper section, said shoulders being formed by depressions, substantially as described.

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Witnesses:
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