

Low constructional cost, neatness and solidity are features of this

Concrete-lined Well

MY vacations are apt to be "busman's holidays," for I am usually looking for interesting ideas for these pages. Back in the Mutual Help chair feeling rather overdressed and decidedly "collar-proud" after a holiday during which I seldom wore more than sandals, shorts and suntan, I decided that this well-sinking hint was well worth passing on.

Down at Charlie Ironmonger's place at Karridale I saw several examples of applied ingenuity including a neat concrete-lined well. At first glance I thought that it was lined with pre-cast concrete cylinders, but learnt that Charlie and his son David had dug and lined it themselves using a mould made from two bitumen drums.

The well was 13ft. deep and about four feet in diameter when completed, but Mr. Ironmonger told me that they had constructed a similar well on another property and this was over 20ft. deep. The wells were sunk in circular form, the hole being about 4ft. 8in. in diameter and carefully plumbed.

The sides of two bitumen drums were used, the tops, bottoms and rims being cut away and the edges smoothed. A cut from top to bottom of each gave two curved sheets of stout metal and these were opened out so that when put together they would make a cylinder four feet in diameter.

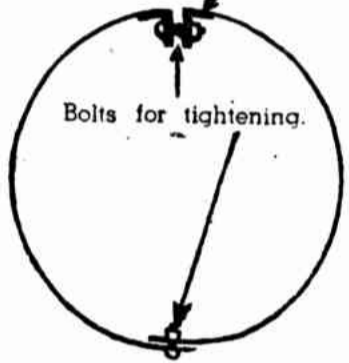
On one side, the sheets were lapped about three inches and drilled to take short bolts. On the inside portions of the other edges, 9-inch lengths of 3-inch angle iron were welded at the tops and bottoms of the two sheets. The angle irons were drilled with corresponding holes so that bolts could be inserted to draw the edges together completing the cylinders.

The cylinder thus formed was lowered into the well and placed in position so that there was a 4-inch space all round it between the outside of the cylinder and the wall of the excavation. A trough or chute was made by nailing two long lengths of 6 x 1 timber together in the form of a V and this was suspended from a tripod erected over the well.

A dry mix of three parts gravel, two parts sand and one part cement was used for the

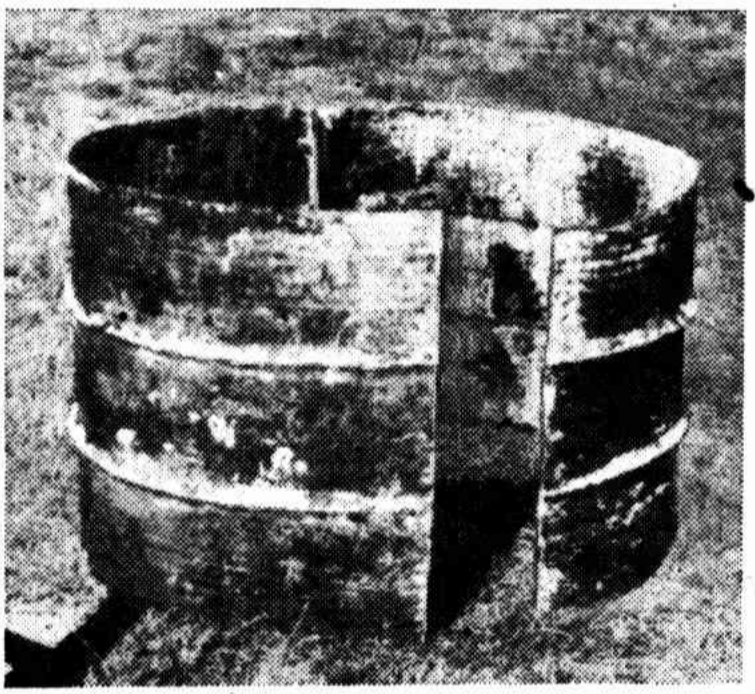
bottom portion of the well which contained water. This was shovelled into the chute

Lengths of heavy angle-iron welded to edges of drum to give tight joint.



Drums overlapped about 3in. and short bolts used

Diagram plan showing method of making the mould.



The mould made from two drums that was used when lining the well.



The mouth of the well. It is intended to build up the wall above ground level and fit a cover.

and slid down to where a man in the well supported the end of the chute on his shoulder and directed the mixture into the space between the mould and the wall, ramming it as it was poured. Suitably-sized lumps of ironstone were rammed into the space to conserve concrete. The first pouring in the dry state was left for two days to set, after which the bolts were removed from the angle irons and the mould pulled away from the concrete, by drawing the ends inwards and overlapping them to reduce the diameter of the cylinder.

Two lengths of 4 x 2 in. jarrah were then let into the concrete which at this stage could be easily cut away to receive them. The timbers ran across the arc of the circle about 8in. from the inner surface and were parallel and level with one another. They served as supports for the mould when the second layer

of concrete was poured and were left in position to serve as the rungs of a ladder when the well was completed.

The second layer was mixed and poured in a wet state and this only required one day to set. Thereafter a layer a day was poured, each layer carrying two more jarrah steps as described.

The result was a neatly-finished well with permanent ladder. Apart from labour, the cost of construction was al-

most negligible as the whole well only took 12 bags of cement. Sand, gravel and ironstone was all available on the property.

Incidentally, while they both have no objection to arduous toil, the Ironmongers avoid unnecessary fatigue when mixing concrete. They constructed a sturdy table about 8 feet square and do all their mixing on this, saving many back-aches.—M.

CONCRETE BATH PAINTING

DEAR Martingale,—We have a cement bath which we have been using for some years. When it was first made we painted it with green enamel which very soon came off. I would like to know if there is any way in which to clean it thoroughly and repaint it. There is a white deposit all over the bath caused through the magnesia in the water. If there is any way in which you could help we would be very grateful.

CEMENT BATH, Roebourne.

[I referred your letter on painting a cement bath to Clarksons (W.A.) Ltd., of William-street, Perth, and was informed that first of all a blowlamp should be used to burn off all paint and soap residue that may be on the bath. Then a coat of Silversheen should be applied; next a coat of white Dulux and then the bath filled with water for a couple of days.

The bath should be thoroughly dried, then another coat of whatever finishing colour Dulux you require should be painted on. The bath should again be filled with water after this second coat. The water helps to harden the Dulux, and after a day or so the bath will be ready for use. You could purchase a rubber mat to put in the bath where the water flows in, as this will stop the paint wearing.

You would need a pint tin of Silversheen and a pint tin of each of the colours of Dulux you wish to use.—M.]

TICK FEVER

DEAR Martingale,—Could you let me know through your Mutual Help columns about my fowls. They are all dying. They seem to go in the legs, have a greenish diarrhoea and their crops seem full when not full of food they seem to be puffy and gasping for breath. They only last a few days and won't eat anything. Is there any treatment? I also lost a young goose. Could you let me know through "The Western Mail" as soon as possible if there is anything I could do as I have ten young turkeys and don't want them to get it.

FOWLING TROUBLE, Katanning.

[I should very much like to have written you a personal let-

ter to enable you to get on to the job ahead of you, but as you omitted mention of your name this was not possible. Readers with Mutual Help queries should always state name and address whether these are for publication or not.

The symptoms at once suggest tick fever, and to get rid of the fever you must clear out the tick infestation that is causing it.

You are recommended, therefore, to spray the yard, roost, etc., at once with creosote, paying particular attention to cracks and crevices in the woodwork as the tick seek shelter by day in such places. Repeat the spraying in a fortnight's time, and after that at about three-monthly intervals to be on the safe side.

In New South Wales, the Department of Agriculture has developed a serum predisposing birds against tick fever. The serum, which has to be injected into the fleshy part of a leg, sets up a mild attack of the disease which confers some degree of immunity against subsequent attacks. This serum, should you decide to use it, can be obtained through Barrow Linton and Co., Wellington-street, Perth, who would advise you as to its use.

But a good spraying with creosote, as advised, should result in a speedy return of health in your fowl run.—M.]

CLEARING MUDDY WATER

DEAR Martingale,—In the issue of January 4 a Wongan Hills reader asked for advice on clearing muddy water to make it suitable for house use. In 1948 I had a dam put down in pipe clay soil and when it filled the water remained the colour of milk.

I had several bags of hard superphosphate on hand and having read that superphosphate in the drinking water might have a beneficial effect on the stock I emptied two bags of super in each of my three dams.

Within about a week the water in the pipe clay dam had cleared so that it looked and felt like good soak water. The other dams also became clearer and have remained so ever since. The pipe clay dam was of about a 1,200 cubic yard capacity. If the inquirer has some old superphosphate on hand it may be worth a trial.

C.B., Cranbrook.