

### Underdrains Without Open Outlets.

T. B. Terry writes in the Practical Farmer about having put in several "blind" drains in his younger days.

There was much laughing at his expense over twenty years ago when he told of what he had done. Some regarded the matter as a joke. And yet every one of those drains is still doing its work. There has never been any trouble with one of them. Here is the story in his own words; it may be helpful to somebody either next spring or at some future time:

"When draining over rolling land there would be wet places on a side hill, which could not practically be drained and have the tiles empty into the regular main. Perhaps a piece of land would have natural drainage, all but some wet spot. This showed that there was a clay pocket in the subsoil below, a sort of saucer, that held the water. I decided to dig through the rim of the saucer and a few rods on down the slope, into the porous subsoil, as well as up into the wet land above. Then tiles were laid precisely as though the drain was to have a regular outlet, only large-sized tiles were used for two or three rods at the lower end. Then the ditches were filled. The water was collected and ran down to the lower end, and being unable to run out soaked away in the porous subsoil at that point, going out between the joints of tiles. By using large tiles at that point the drain was insured against filling with sediment at the lower end for a long time, any way. Little water runs in these drains, of course, and it is practically clean water, as much pains was taken to bury all tiles compactly in clay. You see the drain makes an outlet through the hard, natural dam in the subsoil that held the water. It was hard work digging through these spots. Other places that were drained in this way were simply wet spots at lower edge of a rolling field, with low land in permanent pasture below. You might call them wet-weather springs. The land was of no use for tillage. Regular little drains could have been put in, but one doesn't want so many outlets into an open ditch. The spots to be drained were too small to make an open-outlet drain profitable. And still they were eyesores. All the land must be plowed anyway, and we wanted to get crops on every rod of it. So a number of little drains were put in as described above. They have no open outlets. The water that they carry down soaks away in the porous soil, and soon finds its way into the open ditches that drain the pasture field. Thus we completed the draining of fields at small expense, after the regular main and lateral work was done. The last job of draining to be done on the farm troubled us for some time. It was a pot-hole near the house and the road and in our best field. Water would eventually soak out of it, but crops were always destroyed. Heavy rain in mid-summer would make quite a pond there, two or three feet deep, and it was aggravating, now I tell you, after we had planted or sown a crop. There was no natural outlet, and to make one we must dig through a bank ten feet deep quite a distance and carry the water in tiles a long distance. This would make the land in the hole cost us far more than it could be worth, but that did not prevent our doing it, so much as that we were very busy and couldn't get anyone to take the job. They could have had hundreds of dollars for a guaranteed success. At last Mrs. Terry could no longer stand it and said: 'I would drain that place if it cost a thousand dollars.' I thought about the drains without open outlets that were doing good work all right, and Robert and the hired man and myself went at the pond hole one spring when it was wet, to see if it couldn't be drained in the same way. As expected, we found gravel in the deep cut, and dug 100 feet in it, laying large tiles, four inches, I think, on a level in this gravel. We had to crib the ditch and ran some risk then. The pond hole was drained with several two-inch drains emptying into the main. Then all ditches were filled. We were thankful when we got the tiles placed in the ten-foot cut. I laid them with a long pole from the top.

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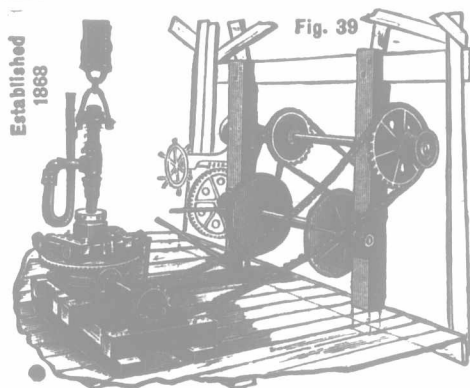
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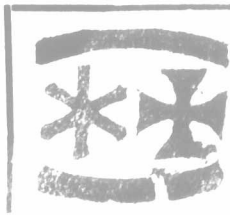
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The main ends right down there in a gravel bank. Clay under and around the hole held the water. As I remember the job didn't cost us over \$10 in money, and from that day to this the drain has done its work well, although several acres of land empty surplus water into this hole. It has been a complete success. You can see it any day as you go by. No crop is ever injured now. This simple arrangement saved us hundreds of dollars. A regular drain would have been a costly affair. You have the idea. Perhaps you have some such spots on your farm that you can make dry next spring at small expense. All that is necessary is porous subsoil near by that you can drain into."

### DISPOSAL OF MR. TITMAN.

The gentleman referred to is that well-known little fellow, in about every litter, that clearly does not belong to the family, yet causes as much bother as all of the others taken together. He is a wiry, puny, pugnacious, pot-bellied nuisance in some instances; in others a dwarf—weak, wobbly and with a whine—but looking for food all the same and always getting in the way of the other pigs or the attendant's feet or pails.

What should be done with the little customer? Many years ago we watched that old-time Poland-China breeder—John Gilmore, of Black Beauty fame—"sorting over" a new-born litter of pigs. In a moment he had seized a little runt by the hind legs and given its unfortunate little nut of a head a crack against the pen partition. "Sure, that's the only cure for thim little lads!" said John, who hailed from County Down or Derry, and then went on to explain that there was no money to be made in nursing a dwarfed, weak or deformed pig to maturity. It seemed cruel and summary execution, this, and one might perhaps take some more humane method of shuffling off the porcine coil of poor piglets, but the principle is right and one that more breeders of pedigreed hogs might practice to advantage. A pedigree, no matter how purple and pure gold it may be, is no apology for the congenital deficiencies of Mr. Titman. Yet many a man raises him tenderly, feelingly, expensively and with difficulty until he can make a pretty good show of filling a little crate and carrying the fame of the pedigree in person to a trusting and expectant reader of gushing advertisements mostly devoted to the puffing of pigs that are "Perfect" or "Simply Perfection."

There is an indifferent pig in most every litter—at least different to the other members of the sucker class—and there is but one proper disposal to make of such a departure from parental type. He should be destroyed for the good of the cause and the welfare of the family. It is true that many fat sows—lazy, obese, unprofitable products of corn consumption—have but few pigs at a litter. This, however, is an insufficient excuse for raising imperfect, delicate and stunted specimens of hog life and burdening them farther with the great and glorious names of proud ancestors. The better way is to wipe out the patent evidences of bad management and improve the conditions and circumstances of the sow so that she will not only bring forth abundantly, but bequeath a modicum of hustle and enterprise to her progeny, stamp them with practical possibilities as well as patrician predilections that, ultimately, they may fill a pork barrel as well as fulfil the promises of the producer. If a man is so tender-hearted that he hates to end the unhappy existence of Mr. Titman he at least should operate in such a manner as to do away with all possibility of the perpetuation of the personal peculiarities and imperfections of the malefactor mentioned. On the contrary, the hog registers record hundreds of members of the Titman family. They do not pose under that hog-nomen, but bear high-sounding and auspicious-dispelling names that instantly would have snuffed out the little runt's struggling spark of life could he have known how he had been called or mis-called. The pruning knife should more industriously be applied to the name part and nameless parts of the average pedigreed pig. In that case Mr. Titman will neither live in name nor fact so far as perpetuation of his tribe and kind are concerned.—A. S. Alexander.

It is said that the wick of a lamp if frayed out to about an inch at the end which is immersed will give a much brighter and stronger flame.