

## FARM AND FIELD.

## A DROP OF WATER MAGNIFIED.

The engraving below is a very faithful representation of the appearance of a drop of water, as magnified by the astonishing powers of the Hydro-oxygen Microscope. The images are projected upon a disk of about 240 feet, and magnified 2,400,640 times.

This instrument presents to our view a world of wonders. Its magnifying powers are astonishingly great. The spectators being introduced into a room adapted to the exhibition, the doors and windows are closed to exclude the solar light; the microscope is then opened and an intense light formed by the combustion of oxygen gas, irradiates the instrument, and reflects upon a sheet of canvas of two hundred and forty feet what we may truly call a new world. A single drop of water is magnified 2,400,640 times. In this ocean (for such it may be called, in comparison

with the incomprehensible diminutive tribes of animalculæ which teem in myriads through it) we see various species of living creatures, some apparently as large as a dog. To give an accurate description of their shape is a thing impossible. Some of them appear with horns, that they bend to every shape; some seem to have but one leg and a tail, others seem to have three some have bodies somewhat of the shape of a tadpole; others bear a distant resemblance to the porpoise; others exhibit the shape of a catfish with the head of a grasshopper; others resemble nothing under the sun, but are wholly *sui generis*. This drop of microscopic ocean, extends its forests far and wide; amidst their wide spreading branches, those tribes of oddities, are seen gamboling, freaking, skipping, swimming. While one stands tiptoe on some lofty branch, another is seen pouncing upon him

from above, and coming in contact, they glance off, one this way, the other that. Their habits appear to be wholly different from what characterizes the animals of the visible creation. They seem to be entire strangers to any social feelings; each one shuns the approach of another, and the slightest touch makes them spring and dart off, as if it were electric. The Hydrophilus, or Water Devil, as he is called, is seen darting through the ocean, devouring all before him.

The Skeleton Larvæ of the gnat is so pellucid that its whole internal structure is quite visible. The motion of the heart and lungs, and the circulation of the blood are all distinctly seen, together with the muscles, which are the organs of its wonderfully rapid and peculiar motion. The softest down of the thistle appears stiff and thick as the quills of a porcupine. The point of the finest needle looks like the end of a club, while the sting of the bee slopes off into imperceptibility.

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## METHODS OF RAISING POTATOES.

A correspondent of the *Country Gentleman* remarks:—I often see in your paper that there is a great variety of opinion in regard to raising potatoes, size of seed and cultivation. Some advocate large, while others prefer small potatoes for seed, thinking that they are as good or better than large ones. They may raise good crops from small seed for one or two years, but if they do not obtain their seed from those that do take pains to select large seed, I think they will soon find their potatoes run out and become small. Why do we select a nice, well-shaped ear of corn for seed, not always the largest but the best developed? Also, why screen wheat, oats, etc., to secure the plumpest and best seed to plant or sow? (At least we should if we do not.) We thereby raise a better quality of grain, and more of it, from year to year. I do not wish any one to infer that we should take the largest potatoes for seed, but those of a good marketable size, of



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nice shape, free from warts, scab, or other deformity.

Having my seed selected, I cut them to single eyes, or at most two, and plant them in drills three feet apart and fifteen inches apart in the drills, having the drills deep, in well-ploughed and thoroughly pulverized soil. I prefer a piece that had corn on the previous year, well manured and ploughed in for that crop, and kept under good cultivation during the season. On potatoes I use some good commercial fertilizer that has plenty of potash in it, and use it liberally—400 to 500 pounds per acre. This will help keep the wire-worms away, and will increase the potatoes in size and quality, I am quite certain. I harrow, as soon as I see the first plants breaking the ground, with a smoothing harrow, to kill all the weeds that may have started. I cultivate often, whether there are any weeds or not, until they are in blossom. I have never failed to raise a good crop of nice smooth potatoes, and there was always a ready market for them. I often get considerable more than market price for them,

which is quite an advantage in a season of plenty like this. My crop averaged about 500 bushels per acre this season.

## HOW A STORY GROWS.

A farmer was once told that his turnip field had been robbed, and that the robbery had been committed by a poor, inoffensive man, of the name of Palmer, who, many of the people of the village said, had taken away a *waggon-load of turnips*. Farmer Brown, much exasperated by the loss of his turnips, determined to prosecute poor Palmer with all the severity of the law. With this intention he went to Molly Sanders, the washerwoman, who had been busy in spreading the report, to know the truth, but Molly denied ever having said anything about a waggon-load of turnips. It was but a *cart-load* that Palmer had taken, and Dame Hodson, the huckster, had told her so, over and over again. The farmer hearing this, went to Dame Hodson, who said that

Molly Saunders was always making things worse than they really were; that Palmer had only taken a *wheelbarrow full of turnips*, and that she had her account from Jenkins, the tailor.

Away went the farmer to Jenkins, the tailor, who stoutly denied the account altogether; he had only told Dame Hodson that Palmer had pulled up *several turnips*, but how many he could not tell, for that he did not see himself, but was told it by Tom Slack, the ploughman. Wondering where this would end, Farmer Brown next questioned Tom Slack, who, in his turn, declared he had never said a word about seeing Palmer pull up several turnips; he only said he had *heard said that Palmer had pulled up a turnip*, and that Barnes, the barber, was the person who had told him about it. The farmer, almost out of patience at this account, hurried off to Barnes, the barber; who

wondered much that people should find pleasure in spreading idle tales which had no truth in them! He assured the farmer all he had said about the matter, while he took off the beard of Tom Slack, was that *for all he knew, Palmer was as likely a man to pull up a turnip as his neighbours*.

## FARMERS' BOOTS IN WINTER.

Farmers' boots, when damp, as they often will be in winter, and taken off at night, will often shrink in drying, and be very stiff and difficult to put on in the morning. If the boots, when taken off, are filled with oats, this will prevent shrinking, and they will dry in their proper shape.

There is probably nothing better for the farmer in doing his winter work than a heavy cow-hide boot, made pliable and water-proof by the following composition:—Melt together, tallow, four ounces; resin and bee's-wax, of each, one ounce, when melted, add a quantity of neatsfoot oil equal to the whole. Apply this to both soles and upper.