### 2. REVELATIONS OF THE MICROSCOPE.

Brush a little of the fuzz from the wing of a dead butterfly and let it fall upon a piece of glass. It will be seen on the glass as a fine golden dust. Slide the glass under the microscope, and each particle of the dust will reveal itself as a perfect symmetrical feather.

Give your arm a slight prick, so as to draw a small drop of blood; mix the blood with a drop of vinegar and water, and place it upon the glass slide under the microscope. You will discover that the red matter of the blood is formed of innumerable globules or disks, which, though so small as to be separately invisible to the naked eye, appear, under the microscope, each larger than a letter "o"

of this print.

Take a drop of water from a stagnant pool or ditch or sluggish brook, dipping it among the green vegetable matter on the surface. On holding the water to the light, it will look a little milky, but on placing the smallest drop under the microscope, you will find it swarming with hundreds of strange animals, that are swimming about in it with the greatest vivacity. These animalculæ exist in such multitudes, that any efforts to conceive of their numbers bewilder the imagination. This invisible universe of created being is the most wonderful of all the revelations of the microscope. During the greater part of man's existence on the earth, while he has been fighting, taming, and studying the lower animals which were visible to his sight, he has been surrounded by these other multitudes of the earth's inhabitants, without any suspicion of their existence! In endless variety of feature, they are bustling through their active lives, pursuing their prey, defending their persons, waging their wars, multiplying their species, and ending their careers, countless hosts at each tick of the clock passing out of existence, and making way for new hosts that are following in endless succession. What other fields of creation may yet, by some inconceivable methods, be revealed to our knowledge!—Am. Educational Monthly.

#### 3. MICROSCOPIC WONDERS.

Upon examining the edge of a sharp lancet wifh a microscope it will appear as broad as the back of a knife; rough, uneven, full of notches and furrows. An exceedingly small needle resembles a rough iron bar. But the sting of a bee seen through the same instrument exhibits every where a most beautiful polish, without the least flaw, blemish, or inequality, and it ends in a point too fine to be discerned. The threads of a fine lawn seem coarser than the yarn with which ropes are made for anchors; but a silkworm's web appears perfectly smooth and shining, and everywhere equal. The smallest dot that can be made with a pen appears irregular and uneven; but the little specks on the wings or bodies of insects are found to be most accurately circular. The finest miniature paintings appear before the microscope ragged and uneven, entirely devoid of beauty, either in the drawing or coloring. The most even, and beautiful, varnishes will be found to be mere roughness. But the nearer we examine the works of God, even in the least production, the more sensible shall we be of his wisdom and power. In the numberless species of insects what proportion, exactness, uniformity, and symmetry do we perceive in all organs! what profusion of coloring! azure, green, and vermilion, gold, silver, pearls, rubies, and diamon's, friuge, and embroidery, on their bodies, wings, heads, and every part! how high the finishing, how inimitable the polish!

# VI. Miscellancous.

## 1. OUR NATIVE LAND.

BY HELEN M. JOHNSTON.

What land more beautiful than ours?
What other land more blest?
The south with all its wealth of flowers?
The prairies of the west?

Oh no! there's not a fairer land
Beneath heaven's azure dome—
Where Peace holds plenty by the hand,
And freedom finds a home.

The slave who but her name hath heard, Repeats it day and night;— And envies every little bird That takes its northward flight. As to the polar star they turn
Who brave a pathless sea,—
So the oppressed in secret yearn,
Dear native land, for thee!

How many loving memories throng Round Britain's stormy coast? Renowned in story and in song, Her glory is our boast!

With loyal hearts we still abide
Beneath her sheltering wing;—
While with true patriot love and pride
To Canada we cling!

We wear no haughty tyrant's chain,— We bend no servile knee, When to the mistress of the main We pledge our fealty!

She binds us with the cords of love,—
All others we disown;
The rights we owe to God above,
We yield to him alone.

May He our future course direct
By his unerring hand;
Our laws and liberties protect,
And bless our native land!

-Selections from Canadian Poets.

#### 2. "GOD SAVE THE QUEEN.!"

The Hansa brings news which we feel sure will send a thrill of joy through every true British American heart. After more than three years of retirement from the world, Her Majesty has once again, to some extent at all events, assumed her place in the Court ceremonies at St. James', and at a grand levee accorded reception to the whole Diplomatic corps.

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We cannot hope for our bereaved monarch entire forgetfulness of her great loss. We would not wish that the pomps and splendors of royalty, or even the o'erflowing tribute of her people's love should ever efface from her mind the memory of "Albert the Good," but let us trust that the poignant anguish of her bereavement may be subdued by the soothing hand of time, and that the loyalty and affection of her subjects may render the cares and anxieties of her exalted position "few ard far between."

And we may well believe that in the coming generations, when a new and vigorous British nation shall have been firmly established on Canadian soil, as our sons and daughters shall then look back into the past history of their land, there shall be no name so hallowed with pure and gracious memories as the name of her in whose behalf all Canada prays to-day, "God Save the Queen."— Hamilton Spectator.

## 3. THE QUEEN'S SYMPATHY FOR DR. CASS, OF COWES.

On New-Year's Day, Dr. Cass, of Cowes, received, through the hands of Sir Charles B. Phipps, a massive and magnificent silver inkstand, "As a Memorial from the Queen, of Her Majesty's appreciation of his skill and attention during the many years he attended in his professional capacity at Osborne." Dr. Cass who has long been held in very high esteem at Cowes, had been the medical attendant upon the royal family and household at Osborne for nearly twenty years; but finding of late that his sight had become so seriously impaired as to threaten absolute blindness, he felt constrained (though still in the prime and vigour of life) to resign his appointment at Osborne, and to withdraw altogether from the profession in which he had established a high and well-earned reputation. This circumstance has been a matter of universal regret throughout the whole of the wide district over which Dr. Cass's practice extended; but amongst the many expressions of sympathy which have reached him from all quarters none have been so warm, and none, of course so deeply gratifying, as those which have been conveyed to him from the Queen. "Her Majesty," says Sir Charles Phipps, in the letter which accompanied the costly memorial, "hears with great regret that she shall no longer be able to avail herself of your valuable medical services, and the Queen still more laments the sad cause which has thus forced you to abandon your profession at an age when your usefulness should be greatest." Again Sir Charles says, "I am directed to express Her Majesty's sincere sympathy for the affliction which has obliged you to discontinue your valuable services." These are queenly words, and well calculated to convey to