

For He hath burst Death's rigid chains ;  
O'er man no more the tyrant reigns.  
Through the dark cloud, the morning bright  
Has changed the gloom of death to light.  
O Grave, where is thy victory !

Thy wiles, O World, shall tempt no more ;  
Thy power to crush, O Pain, is o'er ;  
Thy doubts, O Grief, no more prevail  
Before thee, Death, no more we quail,  
If faith in Christ our anchor be.

The faith that rests on Him who died,  
In Him who rose is justified.  
All power to Him on earth is given,  
All power to Him in Highest Heaven.  
Hail, Jesu ! Prince of victory !

#### HOW THE "UPPER CLASSES" ARE EDUCATED IN ENGLAND.

It is a truism of foreign critics that our country, while she offers a common-school education to the child of every citizen, is signally deficient in the means and appliances of a higher cultivation. To this it must be added that the institutions which do profess to impart this better training are founded upon a theory hopelessly defective, and that their practice is even worse than their theory. In this latter failure, it seems, we are not alone. For many years there has been a protest among English thinkers against the topics of instruction and the methods of their middle class schools and their great universities. Year by year the dissentients have gained strength ; until the outcry for reform has become too loud to be any longer ignored. The desires and grievances of the reformers are ably presented in Mr. Mill's "Inaugural Address," in the series of essays collected by Dr. Youmans, and finally by Mr. Lowe's late address in Edinburgh. Before quoting from the last, as we intend to do, we will state in a few words the substance of the issue. What passes for education in England (these thinkers say) is exclusively classical and mathematical. Nothing is taught with any attempt at thoroughness but Latin and Greek, Trigonometry and the Integral Calculus. Such training must be miserably narrow, even if it were successful ; as it is, young men do not learn even within the bounds. They leave the universities unable to read the plainest description of Xenophon, the simplest ode of Horace, with ease and enjoyment ; and the abstruser mathematics, if they ever understood them, they forget in a twelvemonth. In short, an Oxford graduate finds his previous education utterly useless. It has taught him nothing of the world in which he lives ; nothing of society, nothing of nature, nothing of himself, nothing practical, and nothing scientific ; while the little he does know he knows so imperfectly that it soon fades from his memory. No doubt this is an overstatement ; but after all deductions, enough remains to justify the advocates of change. Without further introduction we proceed to Mr. Lowe's speech.

The proper business of education, he says, is "to teach a person everything important to know, and, at the same time, to discipline his mind." But, as time is limited, it is a question of *relative* importance : What is it *most* important that persons should know ? As to this, Mr. Lowe lays down four rules :—

"The knowledge of things is more important to us than the knowledge of words. To take an easy illustration, it is more important to know where the liver is situated, and what are the principles which affect its healthy action, than to know that it is called *jecur* in Latin or *hēpar* in Greek.

"Where there is a question between true and false, it is more important to know what is true than what is false. It is more important to know the history of England, than the mythologies of Greece and Rome.

"Then, as we cannot teach people everything, it

is more important to teach them practical things than speculative things.

"The present is more important to us than the past. Institutions, communities, kingdoms, and countries, with which we are daily brought into contact, are more important than institutions and kingdoms that have ceased to exist for upwards of 2000 years."

He then proceeds to examine how far the education of the upper classes corresponds to this idea. Mathematics and classics are the chief subjects of education, and their claims come first :—

"I admit that mathematics train the mind to strict habits of reasoning, and habits of close and sustained attention. But these are the synthetical, not the analytical mathematics. Consider to what this form of study trains a man.

"He takes his conclusion for granted and then investigates the conditions on which it depends. Well, that is not a good way of reasoning. The best way of reasoning is to fix upon principles and facts, and see what conclusion they give you, and not to begin with a conclusion and see what principles or facts you may be able to pick up in order to defend it.

"Perhaps the most useful lesson a man can learn is the estimation of probabilities and sifting of evidence. But this is wholly excluded from mathematics, which deal purely with necessary truth. A mathematician is little trained to take those sensible and practical views of the probabilities and the possibilities affecting our daily life, upon which, more than upon abstract reasoning, the happiness of mankind depends."

He then passes to the classics. He declares that language is only a vehicle of knowledge, and demurs to the study of it as an end ; but admits that Latin is of the greatest importance, both in itself and as the key to most modern languages. But the method of teaching it is all wrong.

"Learning the language is a joke compared with learning the grammar. The grammar is one thing and the language another. I agree with the German wit, Heine, who said : 'How fortunate the Romans were that they had not to learn the Latin grammar, because if they had done so they never would have had time to conquer the world.' Montaigne, 300 years ago, saw this, and pointed it out most forcibly, and, by learning the language colloquially 'without a lash, without a tear,' he became able to speak it. But because it is said 'you must discipline the mind,' therefore a boy is put through tortures of elaborate grammars, which he is forced to learn by heart, and every syllable of which he forgets before he is twenty years of age. There seems to be something like a worship of inutility in this matter :—

"The languages, especially the dead—

The sciences, especially the abstruse—

The arts, at least all such as could be said

To be the most remote from common use."

"It is an idea that a thing cannot be good discipline for the mind unless it be something that is utterly useless in future life.

"What is more beautiful, more refined, what will exercise taste better, than the study of the best modern French prose to be found in M. Prevost-Paradol, Sainte-Beuve, and other French writers ? The discipline of the mind is quite as good, and it has this advantage, that when one goes to Paris he will be able to go to a hotel and make known his wants without becoming a laughing-stock to everybody."

Then, after a short attack upon Latin verses, he passes to Ancient History. This, though important, should be postponed to Modern History, both because it is, other things equal, of less moment to us, and because two great ideas are wanting in it, fundamental to our every-day life—the ideas of *progress* and of *representation*.

"Then another thing, not a little irritating, is Ancient Geography. A large portion of time is spent in studying divisions of countries that have long ceased to exist, or have any practical bearing on the world. Of course, if you are to study the language of the ancients, these things must be learned ; but is it not melancholy to think how much modern geography is sacrificed to this knowledge ? There is



nothing in which young men are more deficient than in geography. Take, for instance, Australia. It is very difficult to find a person who knows where the colonies of Australia are. The island of Java is said to have been given up by Lord Castlereagh, at the treaty of Vienna, to the Dutch because he could not find it on the map, and was ashamed to confess his ignorance. I remember a very eminent member of the House of Commons, indeed, who made a speech in which it was quite manifest to me that he thought that Upper Canada was nearest the mouth of the St. Lawrence, and Lower Canada was higher up the river.

"I will now give you a catalogue of things which a highly-educated man—one who may have received the best education at the highest public schools, or at Oxford—may be in total ignorance of. He probably will know nothing of the anatomy of his own body. He will not have the slightest idea of the difference between the arteries and the veins, and he may not know whether the spleen is placed on the right or the left side of his spine. He may have no knowledge of the simplest truths of physics, and would not be able to explain the barometer or thermometer. He knows nothing of the simplest laws of animal or vegetable life. He very often does not know anything about arithmetic, and that ignorance sticks to him through life. He may write an execrable hand; good clear writing—perhaps the most important qualification a gentleman or man of business can possess—is totally neglected. I knew an eminent person who got a first-class honor, and in his essay—a most excellent English essay—there were forty-six misspellings. He may know nothing of the modern geography of his own country; he may know nothing of the history of England. He need know nothing whatever of modern history—the present polity of Europe came into effect.

"He may be in a state of utter ignorance of the antiquities or the laws of England; he knows the laws and antiquities of Greece and Rome. The English laws and antiquities are bound up with our freedom and history, and are important to every day's business; but he knows nothing about them whatever. We have, I here say boldly, a literature unparalleled in the world. Which of our great classical authors in a young man required to read in order to attain the highest honors our educational institutions can give him? He studies in the most minute manner the ancient writings of Rome or Greece.

"Then as for modern languages. There is some feeble sort of attempt to teach them, but nothing effective; and yet surely, if English is to have a preference over modern languages, as it ought to have, modern languages ought to have a preference, as far as the practical affairs of life are concerned, over ancient languages. I have been with a party of half a dozen first-class Oxford gentlemen on the continent, and not one spoke a word of French or German; and if the waiter had not been better educated than we, and known some other language than his own, we might all have starved. That is not nearly all, but that is enough. I think you will agree with me that, as Dr. Johnson said of the provisions in the Highland inn, the negative catalogue is very copious, and I therefore sum up what I have to say by making the remark, that our education does not communicate to us knowledge, that it does not communicate to us the means of obtaining knowledge, and that it does not communicate to us the means of communicating knowledge."

Note.—Mr. Lowe, it will be seen, has considered education in reference to men only; we have given his ideas on the need of better modes for them, in order to draw attention to the subject of woman's education—for which no public provision was ever made—this will be taken up in another number.

#### WHAT A WIFE HAS DONE.

A WORK has lately been published in Cincinnati whose illustrations have a remarkable history. The author of the work is Dr. Wormley, Professor of Chemistry in the Starling Medical College, at Columbus. The title is, "The Micro-Chemistry of Poisons." "It is the result of years of patient experimenting on the effects of the different poisons directly brought to bear on animal life." Dr. Wormley administered them to several hundred cats and

dogs, and by analyzing their blood and the contents of their stomachs, determined the subsequent appearance of the poison-crystals. It was necessary, should the result of his investigations be published, to reproduce upon paper the size and appearance of these crystals. They were exceedingly delicate and various; they appeared for a few seconds under the microscope, and then vanished until reproduced by a second experiment. Under such difficulties, Dr. Wormley for a time despaired of getting them upon paper. His wife, a natural artist, came to his aid, and "with her pencil made perfect sketches of the poison-crystals as the doctor, by chemical analysis, brought them to view under the microscope."

The next problem was how to have them accurately engraved on steel as illustrations of his forthcoming volume. For this purpose he called upon the most distinguished engravers of the eastern cities, who told him that it could not be done in less than three years' time, and would cost almost a fortune of money. At length a Cincinnati engraver, struck with the exceeding delicacy of the drawings, informed the doctor that whoever made the drawings must also engrave the plates." Mrs. Wormley knew nothing of any part of engraving; and her husband began to despair. The conclusion we quote:—

"The doctor was at length persuaded to procure a steel-plate and points. The artist prepared the plate, gave a few items of instruction and explanation to the doctor, who was to carry his message and his instructions home to his wife. The indefatigable wife accepted the responsibility and went to work, and in a few weeks came to the artist's office with her etching, the product of her own hand, being the first she had ever seen. The fair artist was delighted and encouraged when she saw a proof of her first effort. It was so good that, with a little correction, it might have been used; but she felt that she could do better, and the plate was cancelled. The number of steel-plates necessary for the whole work was then ordered. Mrs. Wormley began the labor, and in less than a year finished the etching of thirteen plates, containing in all seventy-eight figures.

"Encouraged by her success in the use of the point, Mrs. Wormley thought she would try the graver, a tool she had not yet used, and necessary in the finishing of the plates. Her success in that was equal to her etching. She then requested permission to use the ruling machine \* \* \* In a little while she was mistress of the ruler, and presented to her husband the whole series of plates, the delicate touches of which defy criticism, even under the scrutiny of a microscope! Indeed, the details of many of the figures can only be obtained by means of the lens. They have been pronounced, by competent judges, the finest set of microscopic plates ever produced in Europe or America."

And the editor of the *Ladies' Repository* justly remarks: "We look upon the result as one of the most wonderful achievements of womanly patience, skill, and perseverance, the full greatness of which it is impossible to make apparent to those who are unacquainted with the difficulties and mysteries of the engraver's art."

Note.—The foregoing sketch we have taken from the *Ladies' Repository*, edited by Dr. Wiley. The full name of the work is "The Micro-Chemistry of Poisons; including their Physiological, Pathological, and Legal Relations. By Theo. G. Wormley, M. D. With Seventy-Eight Illustrations on Steel." The *Repository* publishes one of the plates, whose minute delicacy and variety are truly wonderful. The work is for sale by Lindsay & Blakiston, Philadelphia.

#### THE CITY OF HOMES AND CHURCHES.

THIS significant and noble name has been given by the leading daily journal of this city to *Philadelphia*. From recent official returns it has been found that the city contains one hundred thousand dwellings, and three hundred and eighty-four churches. With a population of 800,000, it can give every eight persons