

bottom of the bottle are not iron, but a compound of iron and oxygen, known as black oxide of iron, (Fe_3O_4). (*Fe*, from Latin *ferrum*, iron, is the chemical symbol for iron.)

The reaction was: $3\text{Fe} + 4\text{O} = \text{Fe}_3\text{O}_4$

Because oxygen gas will permit other substances to burn in it, it is called a *supporter of combustion*. You will notice that in both cases the substance burnt united with the supporter of combustion. When an element burns in oxygen, the product is an *oxide*, and the substance burnt is said to undergo *oxidation*. Split up the end of a dry stick rather finely, so that it will burn readily, and char it by partly burning it. The black substance revealed by the partial combustion, will be at once recognized as carbon. Take a small wide-mouthed bottle full of air. Pour a little lime-water into it, place your hand over the mouth of the bottle, and shake the lime-water up with the air. The lime-water remains clear. Now re-light the charred end of the stick and hold it as far down in the bottle as it will burn without smoking. In a minute, take it out, quickly pour in some lime-water, close the bottle with your hand, and shake as before. The lime-water becomes *milky*. You will infer at once that the same gas is formed when carbon is burned in air as when it is burned in oxygen, that is carbon dioxide gas. Hence the air must contain oxygen, or the carbon could not get it out of the air to unite with. But since the air is not as good a supporter of combustion as oxygen, (for instance it will not relight a stick with a red tip), it cannot consist *entirely* of oxygen.

For the REVIEW.]

Notes for Teaching Music by the Tonic Sol-fa Notation.

NINETEENTH PAPER.

The crowning point of the Tonic Sol-fa Jubilee celebrations was a service, 18th February, in Lawrence Church, Norwich, a memorial to Miss Glover, joint foundress of the Tonic Sol-fa system, conducted by the Archdeacon of Norwich, Ven. T. T. Perowne, B. D., and four assisting clergymen. On unveiling the bronze tablet the Archdeacon said, "It was not the first time Miss Glover's name had been inscribed on a lasting memorial, for when the Tonic Sol-fa college was built, a memorial stone was placed there. The founder of the college, her friend and co-worker, then said, 'It matters nothing to Miss Glover that we should write her name in stone, or in brass, or in bronze. She worked for her Master and is now receiving the reward she sought. But it is *much to us* that we have done this thing.' * * * It was his great privilege to know her long years ago, and to get good from her.

* * She had great culture, great ability, and great power of teaching, but she felt that these gifts were given her for the benefit of others. * * * A worshiper in that church, she thought she would help the congregation to sing the praises of God in a more intelligent and more musical way than they were in the habit of doing. Therefore she laboured among the children there, and in the national schools: she taught the teachers in other schools who came to her; and also congregations, and so her work grew and expanded. She taught him some hymn-tunes when he was merely a boy, and thoughts of her now rose before him—what a real help to him she was! Of such they could say of her as of her co-worker:—

'Life so lived and work so done,
Lives and lasts and knows no end.
Still though dead they speak on earth,
To a vast increasing throng:
Faith, and love, and guileless mirth,
Teaching still to speak in song.'

[Memorial Ode to John Curwen.]

* * "Both Miss Glover—as the first to find out, discover and invent this particular form of musical development and education—and he who took up her work, enlarged and developed it by the aid of great original faculties and powers alike had hand and heart consecrated and devoted to the Master. * * Gathering all into a sentence he might apply to them the words of Christ to His apostles; 'I have chosen you that ye should go and bring forth fruit, and that your fruit may remain.'" The tablet bears this inscription:

