hydrogen. What are the products of its combustion in air?

6. Define acid, base, salt and state the principles of nomenclature applicable to these.

7. Explain by equations the preparation of nitric acid. Illustrate, by experiment, its oxidizing action.

- 8. By what experiment would you shew that nitric oxide contains one-half its own volume of oxygen? How can this fact be used to assist in determining the formula of the oxide.
- 9. By a reference to the oxides of nitrogen illustrate the law of multiple proportions.

10. How would you distinguish between:

(a) Sulphur dioxide and hydric sulphide?

(b) Sulphurous and sulphuric

acids?

(c) Nitrous and nitric acids?

(d) Oxigen and nitrous oxide?
(e) Nitrous and nitric oxides?

- 11. Describe the preparation of ammonia gas. What are the products of its combustion. Explain by means of an equation.
- 12. How can it be shown that three volumes of hydrogen and one volume of nitrogen are contained in two volumes of ammonia gas. What important deduction can be made from this with regard to the nitrogen and hydrogen molecules?

ENGLISH GRAMMAR.

Passages for Analysis, Parsing, and Questions. Selected by H. I. Strang.

For Senior Leaving, Junior Leaving and Primary.

(a) For what am I? What profits me my name

Of greatest knight? I fought for it, and have it:

Pleasure to have it, none; to lose it, pain;

Now grown a part of me; but what use in it?

To make men worse by making my sin known?

Or sin seem less, the sinner seeming great?

Alas for Arthur's greatest knight, a man

Not after Arthur's heart! I needs must break

These bonds that so defame me:

She wills it: would I, if she willed it? Nay.

Who knows?

Lancelot and Elaine.

(b) Thus he read:

And even in the reading, lords and dames

Wept, looking often from his face who read

To hers which lay so silent, and at times,

So touched were they, halfthinking that her lips,

Who had devised the letter, moved again.

Lancelot and Elaine.

(c) But as a man to whom a dreadful loss

Falls in a far land and he knows it not,

But coming back he learns it, and the loss

So pains him that he sickens nigh to death;

So fared it with Geraint, who being pricked

In combat with the follower of Limours,

Bled underneath his armor secretly,

And so rode on, nor told his gentle wife

What ailed him, hardly knowning it himself,