propres, et n'ouvre la porte qu'après avoir s fait accepter une capitulation.

- 1. Parse saisit, place, offensant.
- 2. Explain the meaning and derivation of ermitage, cafitulation.

## D.-GRAMMAR AND COMPOSITION.

- 1. In what different ways do you translate some or any into French? Give examples.
- 2. What is the difference between erri and eru: personne, mase, and personne fem.; qui, and que; que and quoi i
- 3. Write the rules for the plural of French nouns in -ou and -ail with the exceptions.
- 4. Translate into French-Francis the first, the twenty-first of May, the emperor Charles V., the year one thousand eight hundred and seventy-eight
- 5. Write the second person plural preterite indicative of manger, acquerir, venir; the third person singular future of mouvoir, mourir, pouvoir, the present and past participles of moudre, lire, pleuvoir, rire; and the imperative of sen aller and suivre.
  - 6. Correct these sentences, with reasons:
    - (a) L'enfant doit obéir et respecter ses parents.
    - (b) Plus que deux cent prisonniers furent tués.
    - (c) Il est redouté par tout le monde.

## 7. Translate into French:

- (a) That they might have fed the poor and cured the sick.
- (b) The house in which I live is my father's.
- (c) Alexander conquered a great part of Asia.
- (d) She is dying; do not speak to her.
- (c) "John and Mary had been living in this island twelve years, when, one day, as they were seated on the seashore, they saw several black men coming in a boat. At first Mary was afraid, and wanted to run away; but John held her back

(retenir) and said to her: Stay, sister; do you not know that God is here, and that He will hinder these men from hurting us?"

(/) "'You are dazzled!' he exclaimed joyfully, "you were not expecting such a treasure! What do you say to (de) my bargain?"

" Pardon, I replied, gravely; but I think you might have made it better."

## NATURAL PHILOSOPHY.

1. Enunciate the parallelogram of forces.

Deduce from it the triangle of forces.

A weight of 100 lbs. rests on a smooth plane inclined at 30° to the horizontal, and is prevented from slipping by a cord rising at 30° to the plane (60° to the horizontal). Find the tension on the cord and the pressure on the plane.

2. Show how to find the resultant in magnitude and position of two unequal parallel forces acting in opposite directions.

A uniform rigid plank, 15 ft. long, weighing 150 lbs., rests in a horizontal position on two benches, the one bench being two feet from one end of the plank, the other bench being three feet from the other end. Find the pressure on the benches.

3. If forces be represented by lines how must movements be represented? Why?

If 200 lbs. at one end of a plank balance it across a bench, 120 lbs. at the same end, when the bench is removed 2 feet, and 60 lbs. when it is removed 4 feet farther from that end; find the weight of the plank.

- 4. Enunciate the principle of virtual velocities.
- A horse walks 150 feet, and by means of a rope and pulleys raises a weight of 1250 lbs. to a height of 18 feet. Were there neither friction of pulleys nor rigidity of cords, how many pounds would the horse have to pull?
  - 5. Enunciate the laws of fluid pressure.
- A cubical vessel, whose head inside is three inches long, is placed on a horizontal