

FAMOUS AGED PEOPLE, 1898.—Bismarck is 82; Sir Henry Bessemer, inventor of Bessemer steel process, 84; Pope Leo XIII., 87; W. E. Gladstone, "Grand Old Man," 84; Cassius M. Clay, once an eminent American, 88; Prof. Mommsen, historian, 80; King Christian of Denmark, 80; Herbert Spencer, 77; Florence Nightingale, 77; Baroness Burdett-Coutts, 83; James Martineau, philosopher, 92; George Macdonald, novelist, 73; Queen Victoria, 78; ex-Prime Minister Crispien, 78; John Ruskin, 78; Prof. Goldwin Smith, 75; Samuel Smiles, author, 85; Rosa Bonheur, 75.—*Condensed from N. E. Journal of Education.*

Get your scholars to tell what they can about these famous men and women.

SHOOTING STARS.—Many people are under the impression that a meteor is a falling star, but in reality a star never shoots or falls. The nearest star is 200,000,000,000,000 miles away, while a meteor is never more than eighty, and can never be seen above the earth's atmosphere. Further, a star is always luminous, while a meteor is never incandescent until it reaches the earth's atmosphere; it is heated white-hot by the friction of the air. Before a meteor reaches the earth's atmosphere and becomes luminous it is called a meteoroid. There are billions of meteoroids floating like tiny planets around the sun in their own orbits. When overtaken by the earth they tumble to it as any rock would, and become "shooting stars." It is estimated that 20,000 meteors fall daily, but only a small number of these reach the earth. The others are entirely burned up by the friction of the air. One of the largest, weighing ninety tons, has been found by Lieutenant Peary and brought home from Greenland.—*The Great Round World.*

It is amazing, if you have never tried it, how many meteors you can count in the sky of a clear evening. Some will be brilliant flashes of light that every one sees. Others will be only discernible as faint, tremulous lines, vanishing in an instant.

Klondike is said to be derived from the Indian words "thron dak" or "druck," which mean "plenty of fish."

HOW BEE WAX IS MADE.—One of the most taxing of the bee industries is the making of wax. Bees gorge themselves with honey, then hang themselves up in festoons or curtains to the hive, and remain quiescent for hours; after a time wax scales appear, forced out from the wax pockets. The bees remove these scales with their natural forceps, carry the wax to the mouth, and chew it for a time, thus changing it chemically. Thus it may be seen that wax-making is a great expense to the colony, for it costs not only the time of the workers,

but it is estimated that twenty-one pounds of honey is required to make one pound of wax.—*The Chautauquan.*

A talk upon bees, the double purpose that is accomplished in their visits to flowers, the process of manufacturing honey, etc., would be interesting in connection with the above.

POPULATION OF EGYPT.—The census of Egypt taken on June 14th, showed a population of 9,700,000, an increase of 2,900,000 since 1882; in other words, a gain of 42 per cent. in fifteen years.—*Evening Post, N.Y.*

POPULATION OF RUSSIA.—A census of the Russian Empire was taken on February 9th, none having been taken since 1851. The total population is now given as 129,211,113, having about doubled in a period of forty-six years.—*Science.*

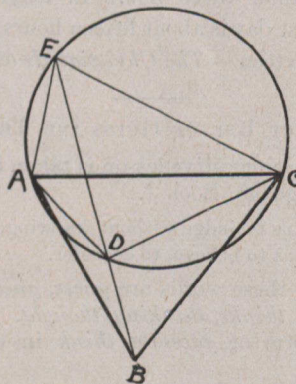
### QUESTION DEPARTMENT.

S.—Will you kindly publish in the next issue of the EDUCATIONAL REVIEW a solution of Example 17, in Heights and Distances in Eaton's Practical Mathematics? Following is the problem: Lines joining three objects are, respectively, 125.6, 130.4, and 112 furlongs in length, and at a station outside of the triangle the first and the last of these lines subtend angles which are, respectively,  $48^{\circ} 58'$  and  $25^{\circ} 52'$ . Required the distance of the station from each of the three objects.

Let the three objects be represented by A, B and C and the distance  $BC = 125.6$ ,  $AC = 130.4$  and  $AB = 112$ . At the point A make the angle  $CAD = 48^{\circ} 58'$ , and at C the angle  $ACD = 25^{\circ} 52'$ . About the triangle ADC describe a circle. Produce BD to E. The point E will denote the observer's position, since the angles AED and ACD are equal, as also are CED and CAD (III.21).

[Note.—Care must be taken to place the angle as here stated, for the point E may take six different positions, and there may be as many different sets of answers, some one of which may have been given in the book other than the right one, as we have not verified the given answers.]

To obtain the required answers the following steps



will be necessary:

- (1) AC and angles DAC and DCA being known DA may be found;
- (2) AB, BC and AC being known the angle BAC may be found;
- (3) Angles BAC and DAC being known the angle DAB may be found;