possible. Nor should the matter be left wholly to chance, nor to the direction of any but those specially qualified. The advice of a physician should be sought and his suggestions carefully observed. In this way there is every reason to believe that any tendency to acquire the disease may be surely and successfully combated. In any other way the result is at best but very uncertain.

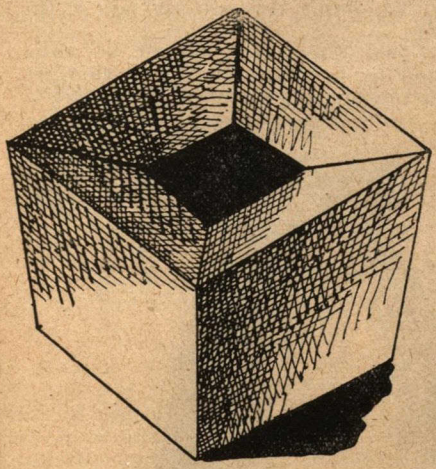

FIG 2

An infant born of tuberculous parents or having implanted in it at birth a phthisical tendency requires the most careful management. On no account should its mother be allowed to nurse her offspring, because therein lies a danger not only to the mother, but also to the child. Such a child should be brought up if possible in the free open air of the country rather than in the foul and vitiated atmosphere of a city. Every means should be adopted to aid in the development of the limbs, and nothing should be tolerated which in any way would tend to hinder the free expansion of the chest. During the common ailments of childhood especially measles, whooping cough and scarlet fever, such a child needs to be specially guarded on account of the tendency which these diseases have to affect the respiratory passages, and thus by reducing their vitality to invite infection by the consumption germ. In the early years free exercises in the open air, gymnastic exercises under supervision, cold sponging, and in general a life of wholesome activity should be encouraged. The diet should be nutritious, but unstimulating and close application to study in crowded school rooms should be avoided.

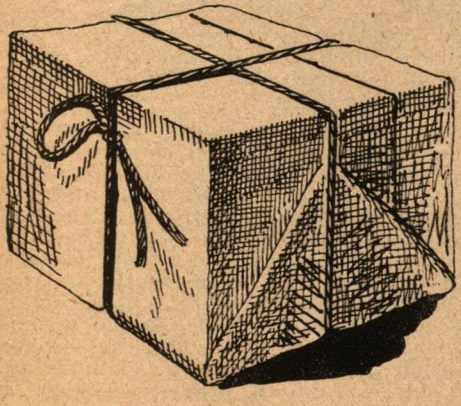

FIG. 3

During and after puberty similar precautionary measures should be faithfully carried out, and all such persons should avoid those conditions, such as indiscreet exposure to changeable or inclement weather, occupations necessitating confinement in poorly lighted and badly ventilated living rooms or workshops, employment involving exposure to irritating vapors and dusts, which tend to excite or maintain catarrhal conditions of the air passages, or to cause what are so well known by the name of common colds.

The most important point, however, in the prevention of the disease which has to be considered is, perhaps, the transmission of the germ from those who are sick to those who are well. Unless this can be successfully accomplished the hope of staying the spread of the disease is small indeed. The disease is propagated chiefly through the agency of the sputum. This when dried is converted into dust and carried by currents of air almost everywhere. Tubercle bacilli are not thrown out from a consumptive patient in ordinary quiet breathing. One observer conducted experiments in this connection as follows: With 219 patients who wore masks for 24 hours, he was able to collect 2600 tubercle bacilli in 32 days or about three germs per hour from 219 cases. But in the act of coughing tiny particles of sputum may be thrown into the air with considerable force and in this moist condition such particles are a source of danger to persons in close proximity to the cougher, unless precautions are taken, because it has been reckoned that in 24 hours one patient expectorating once each hour would discharge 7,200,000,000 bacilli. And it is worth remembering that a patient on the road to recovery may be reinfected by his own sputum, if during coughing small particles are drawn in to the sound lung or into the sound parts of an affected lung.

The care of sputum and its proper disposal involves the consideration of measures adapted to the needs of two classes of patients. These are those who are confined to bed or at least to the home and those who are able to go about from place to place. And it may be well to emphasize the point that it is not the bedridden patient, nor the one who is at the point of death who is the