

coming years. We make no list of such; you know those you need most.

SOME WORDS FOR BOYS.—Many people seem to forget that character grows: that it is not something to put on ready-made with womanhood or manhood; but day by day, here a little and there a little, grows with the growth and strengthens with the strength, until, good or bad, it becomes almost a coat of mail. Look at a man of business—prompt, reliable, conscientious, yet clear-headed and energetic. When do you suppose he developed these admirable qualities? When he was a boy. Let us see how a boy of ten years gets up in the morning, works, plays, studies, and we will tell you just what kind of a man he will make. The boy that is too late at breakfast, late at school, stands a poor chance to be a prompt man. The boy who neglects his duties, be they ever so small, and then excuses himself by saying, "I forgot; I didn't think," will never be a reliable man; and the boy who finds pleasure in the suffering of weaker things will never be a noble, generous, kind man—a gentleman.—*Exchange.*

DR. JACOBI, who has made this a special study, concludes that, as a rule, a child should not be sent to school before he is eight years old. Not till this age is its brain substance sufficiently developed. An infant's brain is soft. It contains a large percentage of water; it is deficient in fat and phosphorus, on which, to a great extent, intellectual activity depends. The convolutions are fewer. The different parts of the brain do not grow in size and weight alike—the normal proportion of the front, back and lateral portions not being reached before the age of ten. So, too, the normal proportion of the chest to the lower portions of the body is not attained until the eighth year, while that part of the

back (the lumbar) on which the sitting posture mainly depends, is even then only moderately developed.

DYNAMITE.—Dynamite is prepared by saturating some porous substance with nitro-glycerine, and for this purpose, charcoal, sawdust and vegetable fibre have been used; but infusorial earth (earth mixed with animal or vegetable matter) seems best adapted to serve as the absorbent.

Nitro-glycerine is the most important of modern explosives; it is a thick, heavy oil with a sweet burning taste, and is readily prepared by the action of a mixture of sulphuric acid and nitric acid upon glycerine. Great care must be used in its preparation. Nitro-glycerine is so explosive that it is dangerous to handle and cannot be transported with safety. It is largely used in the oil regions and was employed in tunnelling the Hoosac Mountain. When the nitro-glycerine is mixed with a porous substance its properties are changed and it is much less easily exploded; therefore ordinary dynamite can be transported with ease and the time of the explosion governed more simply. An ordinary dynamite possess about ten times the power of an equal weight of gun powder, and its effect is largely local, being more violent at the point of explosion.—*Condensed from American Inventor.*

OUR FISHERIES.—The fisheries of Canada rank fourth in the list of natural products. The value last year being \$17,766,404, of which one-half was exported.

A very large proportion, nearly one-half, is found in the waters of Nova Scotia; next in order come New Brunswick, Quebec, British Columbia, Ontario, and Prince Edward Island.

The chief varieties are cod, herrings, lobsters, mackerel, and salmon. The *cod* forms one-fourth of the whole export, less than one ninth of it