

including solution of triangles, with special reference to the processes of surveying.

*Arithmetic* (first and second year).

—Rapid addition, abridged methods of multiplication and division, rapid decimalization of money; application of arithmetic to percentage, proportion, calculation of averages; interest, discount, commission, calculation of present value, C.I.F.; foreign weights and measures, exchange, banking operations, international stock exchange transactions, sinking funds, conversion of loans. Frequent practice in mental arithmetic and casting up of profit and loss.

*History*.—(1) Short sketch of the industrial and commercial history of antiquity. (2) Commercial and industrial history of the middle ages; centres of commerce; divisions of society in England; Peasants' revolt and economic effects. (3) From the discovery of America up to the invention of the steam engine; special study of the development of England's foreign trade. (4) The industrial revolution.

*Geography* (first and second year).

—Physical geography; elements of geology, especially as regards coal and metals; agricultural, industrial, and commercial geography of the world; British colonies.

*Economics* (second year only).—

Nature, scope and methods of economic science; production and distribution, labor, capital, division of labor, values; free trade and pro-

tection; equilibrium of demand and supply; money; credit; wages; relation of State to labor and trade.

*Commercial knowledge* (second year only).—The machinery of business. Merchant, trader, &c.: principal, agent, partners; companies, company law, syndicates and trusts; employers' liability; transit by land and water, navigation law; tariffs, banking, bills of exchange and other negotiable instruments; insurance, hypothecation; chambers of commerce and consulates; patents and trade marks; contracts, telegraph codes. To be illustrated by (a) reference to actual reports of commerce and current newspapers (b) visits to docks and large commercial and industrial houses, banks, etc.

*Modern Languages*.—French and German: Reading of works of travel and industry, economical treatises, descriptive economics; commercial condition of foreign countries taught in the foreign language; commercial correspondence, essays—the foreign language to be used as the vehicle of teaching as far as possible; deciphering of foreign handwriting.

Spanish, Italian: reading, elementary grammar, conversation.

*Chemistry*; *Shorthand* (Pitman's or Script); *Drawing*: Freehand, drawing to scale.

We have uphill work before us, because we have to convert the parent, the merchant, and perhaps also the schoolmaster.

In a telegraph tournament held in New York, in May, 1898, the winner, W. M. Gibson, in the championship five-minute sending contest, transmitted 254 words, with only one error, and his Morse was said by the judges to be perfect. The highest recorded speed of

legible telegraphy in which the Morse code was used was made in a previous contest, in which 265 words were sent in five minutes. An expert operator can send 35 to 45 words a minute, but a steady working rate of 25 to 30 is regarded as good.