

developed along the Puget Sound to the south of the international boundary. And, as has been ascertained to the south of the line, the coal which has been found near the coast is merely a lignite, but that which occurs inland, near the Cascade Range, has been altered into a bituminous coal. A sample of the latter type is found in a 2-foot, somewhat dirty, bed of coal, which has been opened on the slope of Sumas Mountain. Still further inland, the Cretaceous conglomerates occur near Chillawack, but all the coal which they have so far been found to contain consists of a few small masses forming part of the conglomerate, and some very thin strings of a coaly matter. The analysis from the above-mentioned Sumas Mountain seam is as follows:—

Analysis of Sumas Mountain Coal.

	Per cent.
Water.....	4.62
Volatiles combustible matter.....	35.68
Fixed carbon.....	42.00
Ash.....	17.70
Total.....	100.00
Coke.....	Fair.

*Transactions of the American Institute of Mining Engineers.

Haase's System of Sinking Through Quicksand.—The management of the Guenin colliery, Cottbus mining district, Germany, while sinking a pump shaft to a depth of 87 feet through quicksand, recently employed the Haase system, the chief feature of which consists in driving down a series of wrought iron tubes, side by side, so as to form a cribbing for the intended shaft. The tubes are 13.1 ft. long, with an internal diameter of 4.1 in. and 0.2 in. thick. Wooden guides with cast iron crossbars at the top and bottom are attached to the timbering of the shaft so as to secure that the tubes take the required direction in their downward course. Six sets of the tubes were used to reach the coal seam. The shaft was 10.8 ft. by 8.5 ft. within the ordinary timbering, and 9.5 by 7.2 ft. within the tubular lining, and required 64 tubes altogether.

Increase of Wealth in the United States.—The rapid increase of the wealth, business and prosperity of the United States, during the past ten years, is simply marvelous. According to the published figures the total wealth of the country is now \$71,459,000,000, equal to nearly \$1,000 per capita. This is an increase in ten years of \$18,000,000,000, or 42 per cent. Great Britain's wealth in 1885 is given at \$50,000,000,000. The average of wealth per head in England is \$1,545; in Scotland \$1,215; in Ireland but \$565. The total wealth of France is estimated at \$36,000,000,000. England exacts in taxes \$20 per head of population, while each individual in the United States pays \$12 50. America will produce 7,000,000 tons of iron this year, while England's greatest production is 8,600,000 tons.—*Engineer.*

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