

GOLD AND SILVER PRODUCTIONS OF THE WORLD.

At a time when silver is to become a powerful factor in influencing European trade, Dr. Sootbeer affords an opportunity to ascertain what the production of the precious metals has been during the last few centuries. Between the years 1493 and 1875, a period of 383 years, the known production in weight of the precious metals was: Gold, 25,234,954½ pounds troy; silver, 483,770,779½ pounds troy. Some uncertainty must always attend an estimate of this description, extending as it does over so great a space of time, yet in the main the above amount is substantially correct. During a century and a half the proportion of value between silver and gold dropped from about a ratio of 10.7% to about one of 15.5%, and remained at that point for about two centuries more. The pro-

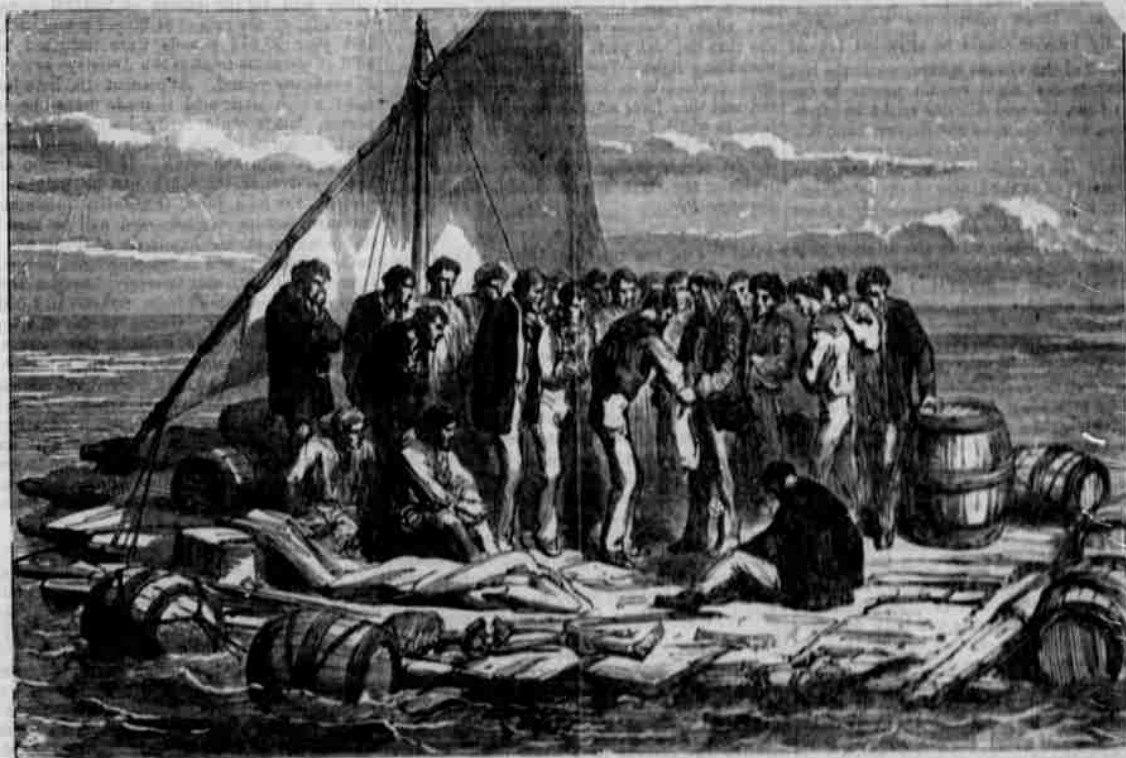
principle, stripped of a great part of the mystery which apparently surrounded it." The relations of value between gold and silver adopted by most modern nations are relations justified by the proportion of the supply of the precious metals. Variations in the proportional value will continue, but the solution of these points must be left to the gradual development of the natural course of events.

GEOGRAPHICAL PROBLEMS SOLVED.—Within the present generation, and mainly during the present decade, nearly all the great geographical problems left us by our adventurous ancestors have been solved; all the great lines of exploration have been taken up and worked out with a success that leaves to the future only the details to fill in. The northwest passage was completed more than a quarter of a century ago; the Australian interior has been crossed and recrossed within the past few years; several bright lines now break up the once mysterious

DRAWING LOTS FOR LIFE.

The perils of the sea have touched the heart and roused the sympathy of all the world for those who are called upon to undergo them. In our early days we used to read the dreadful stories of suffering, of starvation, of thirst and of death, from an utter lack of the needful things of life, and even in our childish philosophy we used to think those most kindly dealt with who sank with the ship, and were spared the days and weeks of agony.

We who live upon the solid land, who feel its enduring support beneath our feet, and go upon it as we will, to see that which our life and comfort demand, are apt to forget the intense suffering of those whose ill-fortune it is to be cast abroad upon the barren waste of the ocean, chained to a raft which saves from drowning, and yet saves but to submit to a worse fate, which saves life only to steal it away by most excruciating torture. We think of these things



DRAWING THE LOT FOR LIFE AND DEATH.

portion of gold produced, to silver, was far larger from 1851 to 1875, than during the earlier periods. From 1876 to 1878 there has been no important change in this ratio, and we may expect that the value of gold is naturally more likely to drop than that of silver. The sudden action of Germany in throwing an immense mass of silver on the market, derived from the surplus silver coin of that country, when a gold standard was adopted, and of France and the Latin Union in declining to receive it overbalanced the natural laws governing the question. But the effect was only temporary, as appears from the reaction already set in by Italy demanding a release from her obligations not to coin silver, and the equilibrium is nearly recovered already. The proportional relation of value between gold and silver is mainly independent of legislative action, and all that legislation has ever done or possibly can do, aside from exercising a depression, is to record the results developed by industrial activity. J. S. Mill says "money, like commodities in general, has a value dependent on, and proportioned to, its cost of production; the theory of money is, by the admission of this

darkness of the "Dark Continent;" the sources of the Nile have been traced, and the course of the Congo all but laid down; the Russians have filled up many important blanks in Central Asia; there is now no mystery to speak of for geographers on the North American Continent, and none of any magnitude on the South; even the great outlines of the ocean-bed have been charted, and now at last, after a struggle begun more than 300 years since, the northeast passage has been made with an ease that makes one wonder why it was not done long ago. A matter-of-fact Swedish professor has shown that with a suitable ship at the proper season this long-sought-for passage to the "Far Cathay" is a question of only a few weeks. Of Arctic feats there now remains only the "dash at the Pole," and that the North Pole will be reached sooner or later there can be no doubt.

ALYALA BAY, at the junction of the river Cullinan and the Gulf of California, is to be the terminus of a railroad instead of Guaymas. The harbor is well protected and the water 60 feet deep at low tide.

occasionally, but they seem so far away that our own feeling of security drives away a realization of the woes which our fellow men are called upon to suffer.

IMPROVEMENT IN CHANDELIERS.—A patent has been taken out by a Philadelphia inventor for a sliding chandelier, which has none of the dangerous and cumbersome mechanism of hydraulic pulleys, chains and weights now in common use. The apparatus consists of a cylindrical chamber, about two inches in height and one and a half inches in diameter, closed at top and bottom. Within this is a dual spring; a brass band slotted down the surface, rimmed at the top and turned at the base, being encircled by a coiled spring, the two contracting and expanding automatically. Within the band, and filling up the space which surrounds the sliding rod, passing through the chamber, are a number of perfectly rounded and smooth metallic marbles, and these, together with the double spring, firmly grip the sliding rod, which can be drawn down or pushed up with freedom and certainty, and without the possibility of the rods slipping, or the apparatus getting out of order.