

not been formed as the result of a single visit to the camp, but have been gradually matured by five different visits to the district. There is a great advantage in paying repeated visits to any locality of geological interest. In the intervals between examinations one has time to think over what he may have seen and to consider points on which he requires further evidence in order to clear up uncertainties or doubts.

### EXCHANGES

*The Coal Trade Journal* for June 5th contains a leading editorial "The State of Trade."

*The Mining Journal*, June 1st, contains its usual valuable summary of the world's doings in mining.

*The Maritime Mining Record*, June 12th, opens with a short paper on "Coal Dust," which discusses the explosion of coal dust, in the absence of fire-damp.

*The Journal of the Franklin Institute* for June contains a paper on "Change of Structure in Iron and Steel," by W. Campbell, Ph.D., of Columbia University.

*The Iron and Coal Trades Review*, May 31st, takes up "Coalite," the new smokeless fuel. Apparently "Coalite" has failed to substantiate the claims of its promoters.

*The Iron and Coal Trades Review*, June 14th, devotes a page to the new fuel, "Coalite." The analysis of "Coalite" is stated to be: Carbon, 80.00 per cent. volatile matter, 12.00 per cent.; sulphur, 1.00 per cent.; ash, 7.00 per cent.

In *Fuel* for June 11th there is an article on the application of Texas lignites to the production of power by producer gas methods. It is stated that a ton of lignite will produce 90,000 cubic feet of gas at a delivered cost of not more than 1 cent per 1,000 feet.

In *The Mining World*, June 22nd, Ralph Stoke continues his article on "The Tasmanian Tin Industry." A third paper on "British Columbia Placers," by Horace F. Evans, gives evidence of very intimate acquaintance with the alluvial gold deposits of that Province.

In *the Mining Reporter*, June 6th, C. C. Lane writes of "The Development of Chilian Mills." Of the Chilian mill the writer says: "When stamps reduce to one-quarter inch they can be credited with three-eighths of the duty, and the Chilian mill is entitled to a credit of five-eighths."

*The Engineering and Mining Journal*, June 8th, opens with a strong article on the "Metallurgy of Aluminium in 1906." The writer is Professor Joseph W. Richards. He states that the capacity of aluminium reduction plants will be enlarged very considerably during 1907 and 1908.

*The Colliery Guardian*, June 14th, contains another instalment of "Evidence Taken Before the Royal Commission on Mines." Watering of coal mines to obviate coal dust explosions was the subject of a great deal of the evidence taken. In a certain Welsh colliery the actual cost of watering was 1.72 penny per ton. This included the cost of all fixtures, etc., and of hauling water in tanks.

*The Mining Journal*, June 15th, in commenting editorially upon the Indian Geological Survey Report for 1906, notes that there is in India "a disposition to turn to the mineral occurrences promising the requisite raw

material for the creation of local industries, for the success of which the great home market and abundant cheap labor afford good prospects. Such a result, while satisfactory to the country, is bound to diminish the interest felt by European mining capital in India."

*The Mining and Scientific Press*, June 8th, has an article on "Acid Flotation Processes at Broken Hill." The Broken Hill ore assays 16 per cent. lead, 15 per cent. zinc and 11 ounces of silver. Formerly only 65 per cent. of the lead and between 45 and 50 per cent. of the silver were saved. A recovery of 80 per cent. is now possible. The ore consists of an intimate mixture of galena, blende, rhodonite, garnet, quartz and calcite.

*The Engineering and Mining Journal*, June 22nd, opens with a very interesting account of the "Medical Department of the Colorado Fuel & Iron Company." This company maintains, besides the magnificent Minnequa Hospital at Pueblo, with accommodation for 210 patients, a dispensary at the Minnequa steel plant, two emergency hospitals in remote camps and dispensaries and resident surgeons at all its properties.

*The Mining Journal*, June 8th, in a capable editorial takes up the annual report of the Egyptian Department of Mines. An excerpt from the report speaks thus of blanketing: "The large concessions that exist in the hands of a limited number of people incapable of developing them still form a big obstacle to the opening up of the country. However, by the end of 1907, nearly all of them terminate, and it is anticipated that considerable local interest will then be taken."

*The Mining and Scientific Press*, June 15th, in a vigorous and characteristically incisive editorial on "The Trial at Boise," discusses the "orgy of brutality" which led up to the trial. "We venture to attribute it, as we attribute many other ills from which we suffer, in the very midst of a triumphant industrial progress, to the absence of a strong public opinion in support of the law." Any excerpt fails to reveal the strong, judicial spirit of this editorial. It is most worthy of careful perusal.

*South African Mines, Commerce and Industries* for April 6th demonstrates the advantages accruing to the users of the tube mill as an accessory to the stamp mill. The manager of the Rand Mines group reports that the 23 tube mills employed by the mines under his charge have increased the duty per stamp from 5,170 tons per day in 1905, to 5,672 tons in 1906. The extraction was increased from 89,877 per cent to 93,858 per cent. The reports of individual companies of the Eckstein group confirm these figures.

*The Science and Art of Mining*, June 15th, gives the first instalment of a very interesting article on "Coal Mining in the United States." The writer's point of view is British. "The only sphere in mining in which they (Americans) surpass the British is in the use of the mechanical coal-cutters." Referring to haulage, the article continues to this effect: "Haulage is mostly accomplished by mules and electric and compressed (air) locomotives, very few endless ropes or main and tail rope installations being at work. Mule haulage in small mines may be cheaper, and for the time being efficient, but in a large mine mules are nothing but a costly nuisance. . . . In the State of Illinois alone, it is typical of the Republic in this respect, 80 per cent. of the mines use all mule haulage. . . . At some of the mines the treatment of the mules is cruel and inhuman."