

selfish he was. The trouble was settled at last, and the play continued; and at length we had them all out, and went in for our innings.

But we went in confidently. For we felt that the petty technical protest the Sydney captain had entered about our having fourteen men on was made because he felt how the game was going against him; and you know, a drowning man will catch at a straw, though we never saw one idiot enough to do it. We had two of their men out, and they had only made about ninety runs between them, and as we had only eight more of their team to do up, you can easily see things were looking black for them.

When we got at the bat, the vast audience on the hill-side woke up. Williams was found using the round side of his bat; but we showed the Sydney team that we didn't intend taking any mean advantage of them, and Williams was ruled off. He said he was glad of it.

A little later on, when some of our smiters were in, they had to place a man down on the beach with a boat so that he could paddle out and get the ball when it fell into the harbor; as the wind seemed to be blowing the leather that way. But with all these artifices employed against us, we kept piling the score up; and then, when we had shewed them what we were made of, it appeared that we had yet another whole and consecutive innings. So there we had to go in again without any intervening rest out in the field. The congregation meantime had begun to file home, disgusted, I suppose, at the shewing their representative team, with its imported round-arm human Gating guns, had made against a scrub aggregation.

Of course, the Sydney papers came out and said what a glorious victory their team had achieved, and so on, *ad nauseam*. But we had anticipated that sort of thing, and didn't mind it. It did our hearts good, too, to see our names in print without for once being connected with the police court; even if the game they were associated with was cricket instead of croquet or puss in the corner. And we all got copies of the paper containing the least unfair description of the match and mailed them home to our friends with the column in which our names blossomed forth marked with red pencil.

OUR PORTRAITS.

Mr. H. M. Whitney, President, Dominion Coal Company, Ltd.—Born at Conway, Franklin County, State of Massachusetts, 22nd. October, 1841. Educated at the public schools, supplemented by one year course at East Hampton Seminary. Commencing with a clerkship in the Conway Bank and serving some time in the Navy Agent's Office, Boston, he ultimately became interested in the shipping business in New York. In 1866, was appointed Boston Agent, and in 1879, President of the Metropolitan Steamship Co., positions which he still retains. In 1887, he became President of the West End Street Railway Co., which he organized for the purpose of developing suburban property many acres of which he owned. The railway under Mr. Whitney's presidency absorbed all the street railways companies of Boston, making, we believe, the largest street railway company in the world. Mr. Whitney was one of the first to see the commercial value of the trolley system, and the West End Railway became the pioneer road in adopting the system. In 1870, Mr. Whitney became interested in coal mining in Cape Breton, and in 1893, as mentioned elsewhere, he successfully accomplished an amalgamation of the leading collieries in that section of Nova Scotia, under the name of the Dominion Coal Co., Ltd. In the same year (1893) he resigned the Presidency of the West End Railway. Mr. Whitney is also, we understand, president of five or six smaller companies and trustee of others.

Mr. David McKean, M.P., Resident Manager, Dominion Coal Company, Ltd.—Born at Mabou, Cape Breton, his father being the late Hon. William McKean, M.L.C.N.S. Educated at Halifax and Boston. Commenced practice 32 years ago as Provincial Land Surveyor. Has been sub-collector of Customs, United States Consular Agent, a Municipal Councillor and Warden of the County of Cape Breton, which he now represents as a Conservative in the House of Commons. Prior to the formation of the Dominion Coal Company, he occupied the position of Treasurer and General Manager of the Caledonia Coal & Railway Company, Ltd.

Mr. W. Blakemore, M.E., Assistant Resident Manager and Engineer of the Dominion Coal Company, Ltd.—Born at Wolverhampton, England, 28th March, 1854, his father being a consulting mining engineer of large practice in the coal and iron districts of North and South Wales. Educated at Wolverhampton Grammar School, subsequently taking certificates in the Cambridge examinations. Prior to coming to Canada in 1893 and receiving his present appointment Mr. Blakemore practiced as a consulting and mining engineer in England. He was the first President of the South Staffordshire Branch of the National Association of Colliery Managers, and among other appointments held the post of Secretary to the Board of Examiners for Mining Certificates. He is a Member of the Federated Institute of Mining Engineers, (Great Britain), and takes an active interest in the work of the Mining Society of Nova Scotia.

Dr. E. Gilpin, Jr., Deputy Commissioner and Inspector of Mines for the Province of Nova Scotia.—Born in 1850, in the City of Halifax. Is the son of the Dean of Nova Scotia, and grandson of Judge Haliburton, so widely known under his *nom de plume* "Sam Slick." In 1871, he graduated from King's College, Windsor, N.S., and then served his time at the Albion mines, Pictou County. After this he spent some time in England at the collieries of Sir George Elliot and others. Upon his return to Nova Scotia he engaged in professional work and later succeeded Sir William Dawson in examining and mapping the iron ores of Pictou County. In 1879, he was appointed Inspector of Mines in Nova Scotia; in 1886, Deputy Commissioner of Public Works and Mines. Dr. Gilpin is a frequent contributor to technical literature among which may be mentioned the Transactions of the American Institute of Mining Engineers, the Royal Society of Canada, the Federated Institute of Mining Engineers, the Nova Scotia Institute of Science, and the Mining Society of Nova Scotia. He is also a valued contributor to the columns of the REVIEW.

Mr. John E. Hardman, S.B., M.E., President of the Mining Society of Nova Scotia.—Is a graduate of the Massachusetts Institute of Technology. His first professional experience was in the Western States, where he gained an intimate acquaintance with metalliferous mining. He visited Canada in 1884, finally locating in Nova Scotia, where he is prominently identified with gold mining, being largely interested in the operations of the Oldham Gold Company, at Oldham, and the West Waverley Gold Co. (Ltd.), at Waverley. Mr. Hardman was one of the original

members of the Gold Miners' Association, and since the formation of the Mining Society has taken an active part in all its proceedings, contributing frequently to the Transactions and evincing a lively interest in local mining legislation, many important amendments to which have been due to his wide experience and professional ability.

Mr. John Blue, C.E., M.E., President, General Mining Association of the Province of Quebec.—Born and educated in the West of Scotland, where he practised as a civil engineer. His first professional work in this country was in the States, where he found scope for his ability in an important contract on a section of the celebrated Hoosac tunnel. He then became associated with the Eustis Mining Company, and for many years has had direction of the extensive mining work carried on at their productive pyrites property at Capelton, Que. He succeeded the Hon. George Irvine, Q.C., as President of the Quebec Association at the last Annual General Meeting, and is one of the most popular mining men in the Province of Quebec.

Mr. R. H. Brown, General Manager, Old Sydney Mines, C.B.—The highly popular manager of the Old Sydney Mines of the General Mining Association of London (Ltd.), is the son of the late Richard Brown, F.G.S., the first manager of the company's affairs in Canada, and the well known author of these standard works, "The Coal Fields and Coal Trade of the Island of Cape Breton," and "A History of Cape Breton." His first education was received at the Collegiate School, Windsor, N.S., and subsequently at the Engineering Department in the St. Lawrence Scientific School, Harvard University. After spending some years as assistant manager at the Lingan mines, he visited England in 1863, gaining experience at one or two of the large collieries in Northumberland, under the celebrated mining engineer, Mr. Thos. E. Forster, of Newcastle-on-Tyne. On the 1st July, 1864, Mr. Brown succeeded his father in the management of the Old Sydney Mines. In addition to this important position, Mr. Brown had also charge of the Lingan colliery from 1871 until its closing down in 1886, and of the Victoria colliery from 1882 until 31st December, 1893, when it was sold to the Dominion Coal Co. (Ltd.) Mr. Brown is, we understand, Mayor of the important community in which he resides. He is also a member of the Council of the Mining Society of Nova Scotia, to whose Transactions he is a valued contributor.

Mr. James Francis, Colliery Engineer, Old Sydney Mines.—Through an unfortunate blunder the portrait of this gentleman has in a number of copies of this issue been designated as Mr. Isaac Greenwell. Fortunately the error was discovered in time to have the correction made before the greater portion of the issue was struck off.

Interesting Experiments with Coal Dust.

A series of interesting experiments in shot firing and its effects upon coal dust took place at the Lower Duffryn Collieries, Wales, on August 6. The object of the experiments, which were conducted by Mr. Gwilym Jones, the manager, was to determine the behaviour of various explosives when covered with coal dust from the two-foot nine-inch and four-foot seams, both from roads and face of stalls. The first shot consisted of 1½ lb. of gunpowder covered with a small quantity of fine coal dust from the two-foot nine-inch seam roadways. The effect was a very large flame, which rose in the air to a height of about ten yards, and produced an intense heat. The same quantity of gunpowder was then tried with no coal dust, and resulted in a very much smaller and clearer flame. The next shot consisted of seven balls of compressed powder covered with some coal dust from the four-foot seam, and the same result was experienced as in the first experiment. A quantity of fine coal dust from the pit screens was tried with 1 lb. of gunpowder and two balls of compressed powder. This gave a larger flame still, accompanied with very great heat. The effect of experiments upon the dust from the face of the workings created some amount of surprise. A quantity of dust from the stalls in the four-foot seam was charged with 1 lb. of gunpowder and two balls of compressed powder, and resulted in a larger and a greater volume of flame and heat than that of the old dust. Half a pound of salbrite (equaling 1½ lb. of gunpowder in strength) was tried in the same amount of dust. Fired electrically, it made a loud report, but there was no flame. Half a pound of ammonite fired with small coal from the face of the four-foot workings, and another charge of 1 lb. of compressed powder covered in fine dust and placed within a short distance of each other, were fired electrically. The former was fired first and the latter immediately afterwards to test the firing of dust in the air. The first shot caused no flame, but the second caused a large flame in the dust while in the air. Three-quarters of a pound of carbonite was also tried, but no flame was emitted. Mr. Jones then experimented in an arch 35 yards long, with the floor and sides constructed of crossed timber. Strips of boards were run along the sides in three rows to hold dust, so as to resemble the roadways underground, and coal dust was strewn about the floor, roofs, and sides. The first experiment was made with a charge of 1 lb. of gunpowder to resemble a volume of gas, and to see whether it would ignite the dust and produce a continuation of the flame through the arch. The powder fired in the ordinary way, but did not ignite the dust. One pound each of gun and compressed powder were tried, and ignited the dust immediately on the explosion of the powder, but, there being no current of air, the continuation of the flame did not take place. Experiments with cannon were then made, but did not cause an explosion of dust, the place proving not very suitable for the experiment. The experiments were admirably conducted, and proved very interesting to the large number of people who witnessed them. The result showed very clearly that the ordinary gunpowder, both loose and compressed, would fire the dust, whereas the high explosives made no flame.

Novel Gold Amalgamation.—A novel method of retorting small quantities of gold amalgam is announced by the Australian *Mining Standard*. We recently asked a miner, who was getting fine gold by sluicing, how he saved it. "I use quicksilver," he said, "and squeeze it through calico, and when I have got the amalgam as hard as I can—" "You retort it," we said. "No, I don't, and yet, I do—I don't as you mean, retort; but, I do, as I mean it myself. I get a potato, cut off one end, and scoop out a cavity in it large enough to take my ball of amalgam. I next take a spade or piece of flat iron, and place that over the fire, and then upon that I place the potato with the cut side down. As the amalgam gets hot the quicksilver evaporates and goes all through the potato; but it can't get through the skin, and neither can it escape by the iron, for the spud is stuck to the spade. When it is done, I take the spade off the fire and let it get cool, and then I have my gold on a button on the spade, and my quicksilver all in fine globules in the potato. I break that potato up under water and I have all my quicksilver."