123 C.—3.

During the past year an expenditure of about £30,000 has been made in opening up their other mine at Granity Creek, which contains an area of 2,950 acres, and this expenditure has absorbed

the profits of workings of the Coalbrookdale Mine.

From Denniston to the bottom of the hill at the termination of the railway there is an incline in two lengths; the upper incline is 33 chains in length, having a total fall of 830ft., having a maximum grade of 1 in 1·3, and the lower incline is 50 chains in length, having a ruling grade of 1 in 2·2. The inclines are worked by direct rope-haulage, the descending weight being utilised to haul up the empty wagons. These wagons when full of coal are about 11 tons in weight, a steel-wire rope 4in. in circumference being used in lowering them. Special brakes are used for lowering this weight. The brake used resembles a direct-acting winding-engine, but the action is exactly the converse. Water is used to check the action of the pistons instead of steam. The water is drawn off at each stroke and its place is supplied with cold water, as the heavy strain would otherwise raise its temperature to boiling-point. A strap brake was formerly used on the upper incline, but it wore away at such a rate as to not only cause considerable expense, but also great

The incline is laid with flat-bottomed rails, 40lb. to the yard. At the top there are three lines of rails, and at the place where the wagons pass each other there is a double line, and below this

passing-place there is only a single line.

The Granity Creek lease is about ten miles to the northward of the Coalbrookdale Mine. company estimate that there is at least thirty million tons of coal in this lease. The coal-workings will be about 1,500ft. above the flat, and the coal will be brought down in the mine-tubs by an incline 51 chains in length; in this incline there are two tunnels, 10 chains and 12 chains respectively; these tunnels are each 10ft. wide and 7ft. high, and between the tunnels there is a skew bridge of 18ft. span, of four rolled-iron girders resting upon stone abutments. At the mouth of the second tunnel from the bottom, the hillside, which is very steep at this place, began to show signs of movement, which necessitated a very strong abutment being built up against the face of the steep rocks, the wall being 30ft. high, which cost about £2,000. At the top of the incline there is to be a hydraulic brake and two surging-drums, one behind the other; these have been ordered from England, and are to cost £1,800. The haulage-rope for the incline is 4\frac{3}{4}in. in circumference, made of plough-steel—Lainglay Cradock rope. Coal-bins and screens, capable of storing 4,000 tons, will be constructed at the bottom of the incline, and the place laid off so that the storage of the bins can be increased to 10,000 tons.

On the flat at the bottom of the incline the sidings will be about 40 chains in length, and there will be seven lines of rails underneath the bins. This necessitates a filling in of about 16,000 cubic yards of material. A large bridge is constructed across Granity Creek, having five lines of rails. Two workshops have been erected—namely, a blacksmith's and carpenter's, and also a large store for the storage of goods and material. In the blacksmith's and fitting-shop there is a steamhammer, punching- and shearing-machines, a radial drilling-machine, and a screw-cutting Tangye lathe with 10-in. centres, with gap; also a screwing-machine, with steam-engine, and fan for blowing the blacksmith's fires. There are 400 tons of rails on hand, and 1,000 sleepers ready for

laying down, and material for 300 mine-tubs, the tubs being made on the premises.

At the mine on the top of the hill there are 60 chains of drives open, and about 7,000 tons of coal have been tipped into the creek, and partly washed away. Two blocks, each 5½ chains square, have been holed round ready to start 50 faces when the works to take down the coal to the railway are completed. The workings and the top of the incline will be connected with a light railway, and two engines will be used for haulage. Provisions are being made for an output of about 500 tons a day when workings are commenced, and further provisions will be made for a prospective output of 200 tons per hour. The company estimates that it will yet cost about 500 000. prospective output of 200 tons per hour. The company estimates that it will yet cost about £20,000

to complete the works ready to send down coal.

During the time the Westport Coal Company have been carrying on operations it has paid away £1,147,014, namely :-

							£
Wages			•••		•••		499,345
Royalty, railway		rates and	taxes	•••	•••		236,217
Freights to local	carriers	• • •	•••	•••			346,892
Stores and mater	ial	•••	• • •	,	•••	•••	64,560

£1,147,014

At the present time the company pays away about £70,000 per annum, and this will be considerably increased when Granity Creek Mine is opened.

The coal from this company's mines compares very favourably with the North of England and Welsh coal, as will be seen by the following tests which were made at Woolwich Dockyard:-

		Pounds Water evaporated by 11b.	Percentage of			
Place where Coal was got.		Coal at Constant Temperature. Feed-water 100°.	Clinkers.	Ash.	Ash and Clinkers.	
Average North of England coal "Welsh "New South Wales", "Coalbrookdale",		8·25 9·11 8·30 9·83	1 1·94 2·11 0·91	4 4·22 7·15 3·30	5 6·16 9.26 4·21	