

ELECTRICITY INSTALLED AT CAVE HILL.

The installation of an up-to-date plant for the generation of electricity for lighting and motive power was completed this week at Mr D. Mitchell's Cave Hill estate, and by the courtesy of the manager, Mr C. J. Mitchell, our representative was enabled to obtain a description of the new machinery which has been put in.

During the 30 years the Cave Hill estate has been in existence, the buildings have been illuminated by kerosene lamps and candles, and the several machines which are used in the various departments of the works have been driven by water power and steam. These comparatively primitive methods have now been superseded by the all powerful electricity.

The electricity is generated by a 22 K.W. generator, driven by a water wheel, the same old overshoot wheel, it might be mentioned, which has done duty in various ways for about 25 years. The power house, in which the generator has been built, is situated at the eastern end of the group of buildings which constitute the "Cave," and the electric power is conveyed 270 yards by overhead wires to a 15 h.p. motor, located in a specially constructed room near the factories, which is connected with the power house by telephone. The motor converts the electrical energy into mechanical energy, by which the whole of the buildings are illuminated, and furnishes motive power required for refrigerating plant and other machinery, so displacing the steam engine which has been utilised up to the present. The electricity has not yet, however, been permanently applied in this connection, but merely as an illuminant, although in both departments it has proved eminently successful. At present there are over 70 lights in use. Mr C. J. Mitchell's residence is lighted throughout in all of the rooms, and an electric radiator for heating purposes is also provided in the breakfast room. In addition to the manager's residence, lights have been provided in the bacon factory, cheese factory, slaughter house, stables, cow-sheds, boiler house, engine room, offices and the men's quarters, and it is almost needless to add that the advent of the improved illuminant is hailed with satisfaction by the employees and others who will derive the benefit of its use. The steam engine will shortly be discarded, and the machinery will be operated wholly by electricity. Mr Mitchell has in view the extension of the plant to illuminate the quarry works, drive the stone crusher, and haul the lime stone from the quarry.

Although, of course, Mr Mitchell sees many advantages in installing electricity at Cave Hill, he is to be congratulated upon the enterprise he has exhibited in doing so. This is one of many enterprises into which Mr Mitchell has entered in the belief that if a thing is worth doing it's worth doing well, and that being so one can quite conceive the reason that, as in this instance, his undertakings have almost invariably been crowned with success.

The installation of the plant was carried out by Mr J. L. Newbigin, of J. L. Newbigin and Co., electrical contractors, Little Collins-street, Melbourne, to whom, in addition to a special reference to the creditable, business-like way in which he has done his work, a word of thanks for his courtesy to our representative is due. The mechanical work in connection with the water wheel, etc., was effected by Messrs Jacques Bros., engineers, of Richmond, and the solid concrete bases upon which the generator and motor are fixed were built by the manager of the quarry, Mr I. Fuller.