

TEA MACHINERY.

THE MCKERCHER C. T. C. ROLLER.

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Messrs. Marshall, Sons & Company have recently placed on the market a new type of rolling machine known as the McKercher C.T.C. machine which seems to possess many points of interest, though details of its performance have not been received by the writer.

The machine consists essentially of two rollers of chromium stainless steel, each 48 in. long and 5 in. in diameter, driven by separate belts and set one above the other as in an ordinary mangle. The top cylinder is driven at 600 revolutions per minute while the lower one can be adjusted to rates between 60 and 100 R.P.M. to suit different qualities of leaf. The rollers are serrated and fluted in such a way that each fits into the other as it works round. The rollers rotate in opposite directions and the leaf is fed by a spreading arrangement on to the slower moving roller. The leaf is carried up by this and is nipped between the two rollers before being discharged. The nip is said to be so strong and instantaneous that the leaf is torn and distorted and practically all the cells are ruptured. As it passes from the roller the leaf expands again and takes up all the juice so that none of the latter is expressed. Moreover, the action being practically instantaneous, there is no development of heat. The machine requires about 4 to 5 H.P. and, it is estimated, two units would serve for a crop of 400,000 lbs. or three for a crop up to 1,000,000 lbs.

It is understood that the method of working in India is as follows. The leaf is first rolled in an ordinary roller without pressure and then sifted. The fine bulk is then put through the C.T.C. machine and again sifted. The leaf passing through the sieves is at once fermented while the residue is put again through the C.T.C. machine, resifted, and this process repeated until all the leaf passes through the sifter. In the meantime the coarse bulk from the first roll is again rolled in an ordinary roller, and the rolled leaf then put through the C.T.C. roller and sifter until it all passes through the sifter when it is fermented and dried in the ordinary way.

The essential improvements claimed are that there is no production of heat, uniform fragments of leaf are produced during the green stage and, the sap being thoroughly expressed and smeared over the leaf surface, an even and rapid fermentation is obtained. Grading of the fired tea is simplified, grading percentages being adjustable to

requirements by altering the size of mesh on the green leaf sifters. The bulk of the tea after firing is passed through a small grading sifter near the drying machine and at once stored in the bins.

The process generally is said to result in strong and coloury liquors.

The price of the machine is, we understand, about £585 f.o.b. English ports. A considerable number of machines has been installed in North India and further details as to their working are being sought.