

AUTOMATIC TOTALISATOR

INTERVIEW WITH MR. G. A. JULIUS.

Mr. G. A. Julius, B.S., M.E. Consulting Engineer, the inventor of the new automatic totalisator which has been installed at Ellerslie, is at present on a visit to Greymouth on business connection with the N.Z. Greenstone Company, and in the course of a short chat with our representative gave some interesting particulars of the new machine.

It is indeed a wonderful piece of mechanism, and stands out as a sort of glorified cash register and telephonic exchange in combination. As a machine it is unrivalled; it answers to the call of its twenty or thirty operators so promptly and so efficiently, that it might almost be described as a thinking machine. It not only adds, but registers the results and totals the lot with practically infallible accuracy. It is claimed for it that it is impossible for the machine to make a mistake, and so far it has carried out at Ellerslie everything that has been claimed for it. The new "tote" is a marvel, but possibly, the most wonderful thing about it is the fact that it was designed by its

inventor, on paper, with such accuracy that when the working model was made from the drawings and, later on, the big machine now installed at Ellerslie was constructed from the same designs, little or no material alteration had to be made to ensure efficient working.

It is not easy to describe the complex machinery that goes to make up the new "tote." From the exterior, when betting is in progress one gains the impression of rapidly moving figures, tens multiplying into hundreds, and hundreds into thousands, on the board which carries the numbers of the horses (these running from 1 up to 30) and on which the betting is recorded in 105 units with the ever changing grand total surmounting the whole array of figures. With betting in full swing, one notices that there are 30 windows at which tickets are being issued. Twelve of these windows are reserved for £1 tickets, 17 for 10s tickets and one for £5 tickets. The betting public making use of the totalisator advance to these windows, pay over their half sovereigns, sovereigns or fivers, give the number of the horse on which they desire to stake their money, and receive in exchange a ticket, stamped, punched and perforated, the two latter operations being accomplished by the machine, which

simultaneously and automatically records the bet on the horse itself.

Inside the totalisator house, the clerks at each window have directly behind them, or at their side (it depends how they are standing), a stamper frame with thirty handles on each frame, one of these handles being coupled on to each horse on the 30 horse machine. There are 30 of these frames in all, and there are fifteen levers on the upper portion of the frame, and fifteen on the lower portion, all pulling downwards. As originally planned the operator inserts a ticket into a slot immediately above or below (according to its position in the frame) the number on the lever representing the horse on which the bet is made. As the levers are pulled they set in motion a series of punches that automatically perforate the number of the horse on the ticket and simultaneously register the tickets on to the horse gear and also on to the grand total. Before, therefore, the tickets are handed to the investor, the fact that the bets have been made is registered on the machine and is apparent on the totalisator board outside. With 30 stamper frames at work, every operator is able to issue tickets on any horse in the race, the 900 levers on these frames each communicates

by means of a wire attached to their encased ends, with the escapement levers in the body of the machine. The machine itself guards against the possibility of any mistakes being made. The operator soon learns that it is impossible to play tricks with the machine, and that only the full registration of every ticket issued is possible. By an ingenious arrangement the operator himself is able to guard against the possibility of mistake, either through carelessness or misadventure. Finally, the man in charge of the machine has complete control over the operators and not a single ticket can be issued after the time for closing the machine arrives. When the signal to stop betting is given the man in charge of the machine pulls his lever and the machine is locked so that it is impossible for other tickets to be issued.

Weights supply the motive power of the machine, each horse gear being provided with winding machines operated by weights, and weights are also provided for each of the counters. One man can easily keep all the winding done on the machine even in the largest meeting and his work can be done without robbing the machine of its motive power for one instant.

The automatic totalisator was used for the first time at the Auckland Racing Club's Meeting held at the Ellerslie course last Easter Saturday, and Monday and gave convincing evidence that it has come to stay. The machine, not only registers with the most trustworthy accuracy the investments made, but also effects a great saving in time (which is so necessary at a meeting) in placing the totals before the public, and to a considerable extent, does away with the delays, which are so common at the present time, between the starting of the machine and the starting of the race.

As an example of what this means to all concerned it might be mentioned that at the last race on the programme of Easter Monday the sum of £6,833 was invested and the machine, working to a 10s unit, had to register 13,666 distinct numbers. Two minutes after the machine closed the figures had been checked and the starter had received instructions to despatch the field which he did a minute later. In the same event which was held the previous year at the Easter Meeting of the Club the starter, although there was a much smaller sum on the machine, was not given word to start the event until thirteen minutes after the tote had been closed. The new machine makes

it an impossibility for a mistake to be made in making up the totals and it is wonderful how easily and simply it records almost any number of bets on a particular horse or number of horses at the same time.

Everyone who has seen the machine working has been struck with the great despatch with which the investments are handled and there is a consensus of opinion that the machine will soon be familiar at the meeting of all the important clubs in New Zealand.