

## Newspaper report

This is a transcription of an article The New Zealand Herald, Tuesday, 25 March, 1913. It describes the operation of the first mechanical totalisator, initiated at the Easter meeting of the Auckland racing Club, 22nd and 24th March 1913.

### THE NEW TOTALISATOR

The new totalisator machine was used for the meeting with marked success. It was installed in time for the Christmas meeting, but for various causes it was deemed inadvisable to use it until the Easter meeting. A small knowledge of the extraordinary demands that the work of a totalisator imposes upon its parts shows clearly how mechanism might have failed in a dozen ways. But in the meantime alterations have been made, the machine has become more familiar to its operators, and it worked on Saturday and yesterday with fine regularity, and to everybody's satisfaction.

The chief problem in making a purely mechanical totalisator is to arrange matters so that if two or three or a dozen of the operating clerks all issue tickets on the same horse, the full number shall be recorded in the proper place. That the problem is a difficult one is shown by the fact that this machine, the invention of Mr Julius, is believed to be the only one that achieves the object by means of gearing, instead of with falling marbles, or some such device. The aggregating is done by a very pretty association of crown wheels and epicyclic gears, which, mechanically, is infallible.

The second obstacle of importance was raised by the fact that, in view of the facility with which many investments could be put upon a single horse at a time, the machinery was apt to be run at times so fast that the starting and stopping of the rotating wheels, which, in spite of their light construction, have considerable inertia, set up almost destructive strains and shocks. This trouble has been overcome with an ingenuity altogether admirable. The counter releases a spring-driven gear, which can go as fast as it will irrespective of the motion of the wheel on which the figures are shown to the public, and the wheel simply runs leisurely and smoothly ahead until it overtakes the gear. Even then the wheel, free to make several rapid revolutions, would be difficult to stop at the right place if its speed were not controlled by a governor.

There is a 'relay drive,' and a governor for each of the 30 single horse recorders, and another for the grand total mechanism. The totalisator in full operation presents a remarkable appearance from within, for the machine is an enormous structure, the greater part of which is occupied with the releasing wires and the driving gear. Every time a ticket is issued the clerk pulls a lever corresponding with the number of the horse. The lever pulls a long wire cord; the cord releases the counter. The gearing revolves a little, and the counter wheels turn. Sometimes the wheels move at long intervals; and then, as a horse becomes popular, its set of wheels will commence to spin frantically, so that one might imagine the count terribly apt to fail. But the 'tens' tot up the units, the 'hundreds' go up in their turn; and grand total wheels turn phlegmatic somersaults, and perform mathematical prodigies. The machine was originally intended to punch the tickets with the number of the horse upon which they are issued, but so far the punching mechanism is not in use, and it is probable that an addition will be made so that tickets will be issued from magazines, operated by the levers simultaneously with the recording of the investments.

Speculation was very brisk during the afternoon, with investments reaching to £41,514 10s, compared with £38,026 10s on the concluding day of last year, and making £74,053 for the meeting, against £68,947 10s in 1912, an increase of £5,105 10s.