

Engine and Two Dynamos.

the electrical and mechanical branches of the School of Practical Science. The test comprised thorough inspection of all mechanical details and materials together with operating the plant at various percentages of load ranging from friction load to nearly 50 per cent. overload, taking readings and making calculations to show the efficiency, temperatures, regulation, overload capacity, and general capability of the plant to perform the various duties which may be required of it.

It was further tested to a full load run of ten hours immediately followed by two hours' run at 25 per cent. overload, ing an eighteen hour run at full load.

The generators showed during this test that they could be operated from "no load" to 25 per cent. overload without shifting off the brushes or employing any non-automatic device for any purpose whatever, thus showing the care which had been used in designing the generators so they would regulate themselves under varying conditions to which they will be subjected. Notwithstanding the severe test, there were absohutely no changes required or improvements suggested.

The plant itself is unique, consisting of two dynamos each of 75 kilowatts' capacity connected direct to one engine having a capacity of 300-h.p.

The main switchboard, consisting of ten marble panels, each with its recording instruments, is spoken of by the engineers in charge as the most complicated board they have ever installed, and the successful carrying out of the specifications of this board is sufficient to stamp the contractors as at least the peer of any company in Canada manufacturing

