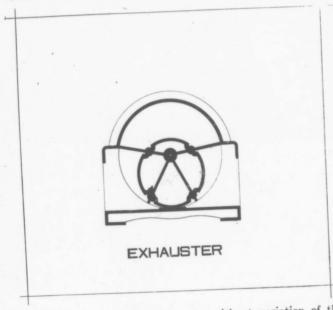
## ENGINEERING CLUB OF CANADA.

From the exhauster the next apparatus is the tar extractor, and it acts up to its name and extracts the tar in a very ingenious manner, the gas being wire drawn as it were. The apparatus consists of cast iron casing cylindrical in shape of three chambers, the lower being the inlet, the middle the drum seal, and the upper the outlet chamber. A seal column is fixed on top of the outlet chamber through which a rod is carried, one end being attached to the drum, the other, by means of a wire rope, which passed round a pulley and fastened to the counter balance weights, enabling the drum to rise and fall



according to the make of the gas, without variation of the pressure. The drum is formed of one or more rows of perforated and slotted plates, so spaced and proportioned as to give the proper amount of surface for the mechanical extract of the tar and tar fog. The bundle of perforated plates are made easily removable through the manholes for cleaning purposes. The machine is also supplied with an automatic bye-pass and relief valves which are normally closed by springs, but which engage with stops and are opened thereby should the drums descend too far and the resistance of the springs be overcome by the unbalanced weight of the drum, as, for example, when the supporting rope should break.