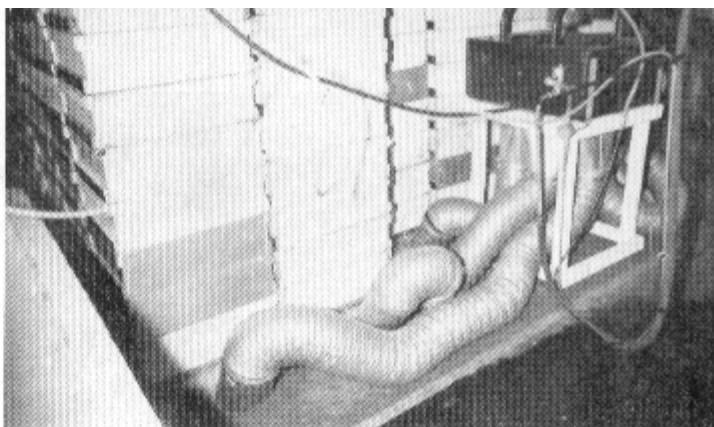


BULK HONEY EXTRACTION FROM FIXED FRAME SUPERS *)

W. A. HARRISON
AUSTRALIA

Supers

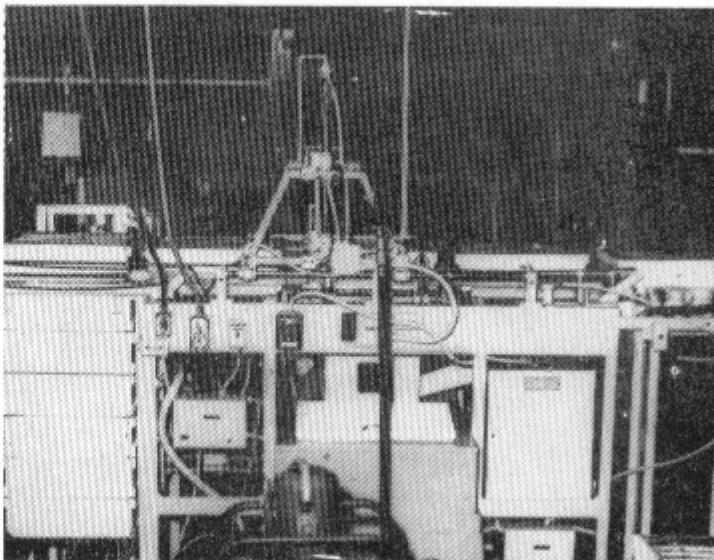
The supers used are 6 5/8 inches (168 mm) deep and the frames are fixed permanently in the super. Plasticore foundation is used with drone cell impressions.



Heating unit in the Blackwell hot box. Steam is piped through a heat dissemination radiator and then blown through the flexible hoses underneath the stacked supers

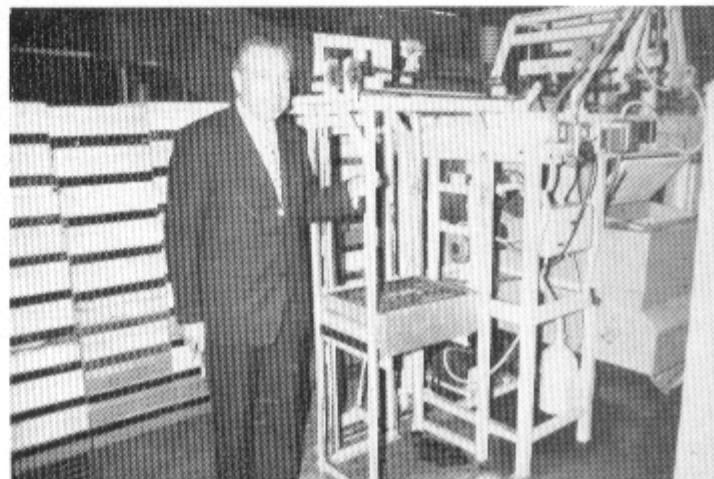
Hot room

The hot room is made entirely of 2" (50 mm) polystyrene. Air is heated and circulated by a steam radiator and fan. The hot air is ducted under the palettes and returns to the heater by flowing over the tops of the supers. The room holds 600 supers, and when not in use, it can be raised out of the way into the rafters.

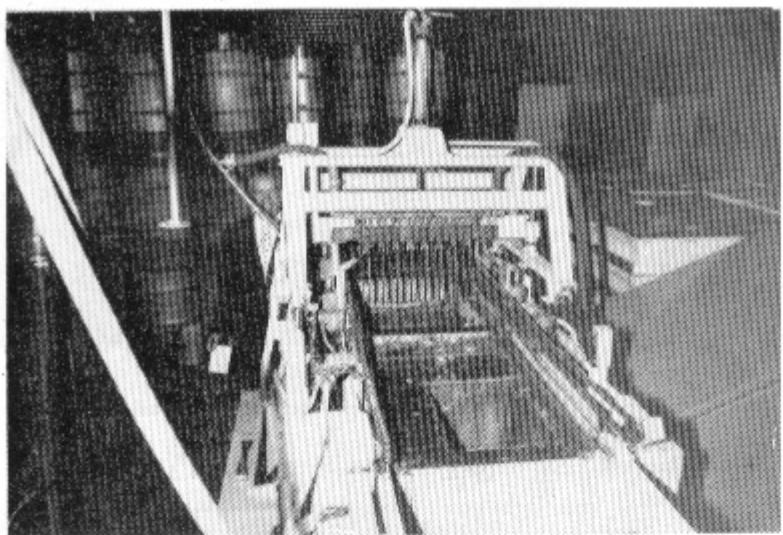


Fox-Harrison uncapper. Automatic wheeling in of supers

Fox-Harrison uncapper from loading side



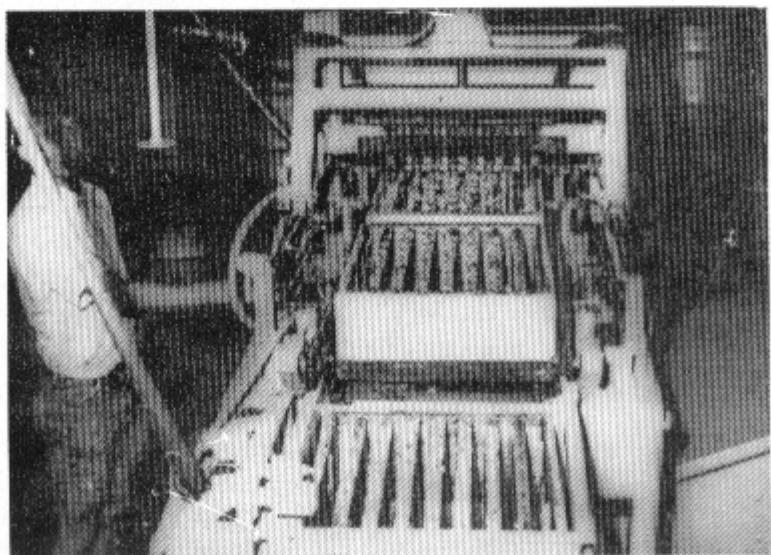
*) The report was accompanied by projection of a great number of slides, several of which we reproduce here.



Fox-Harrison Uncapper (looking down to cutting area from finishing side)

Uncapper

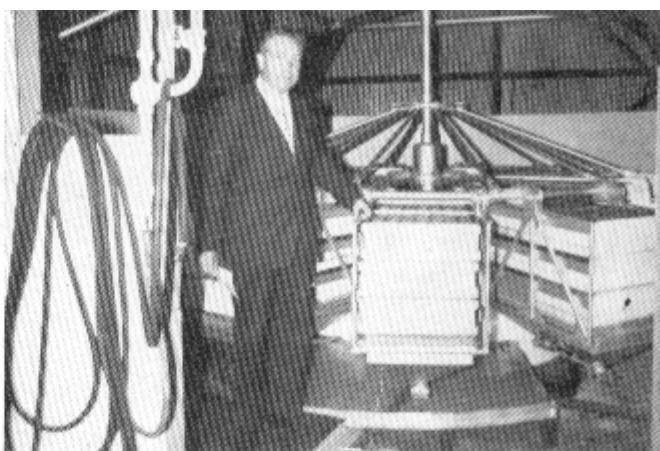
This machine can uncaps about 70 supers per hour. Stacks of seven supers are wheeled into one end of the machine, and the supers are automatically unstacked, uncapped, and restacked. Steam heated knives are pneumatically lowered between the frames, move along the frames, and are lifted out.



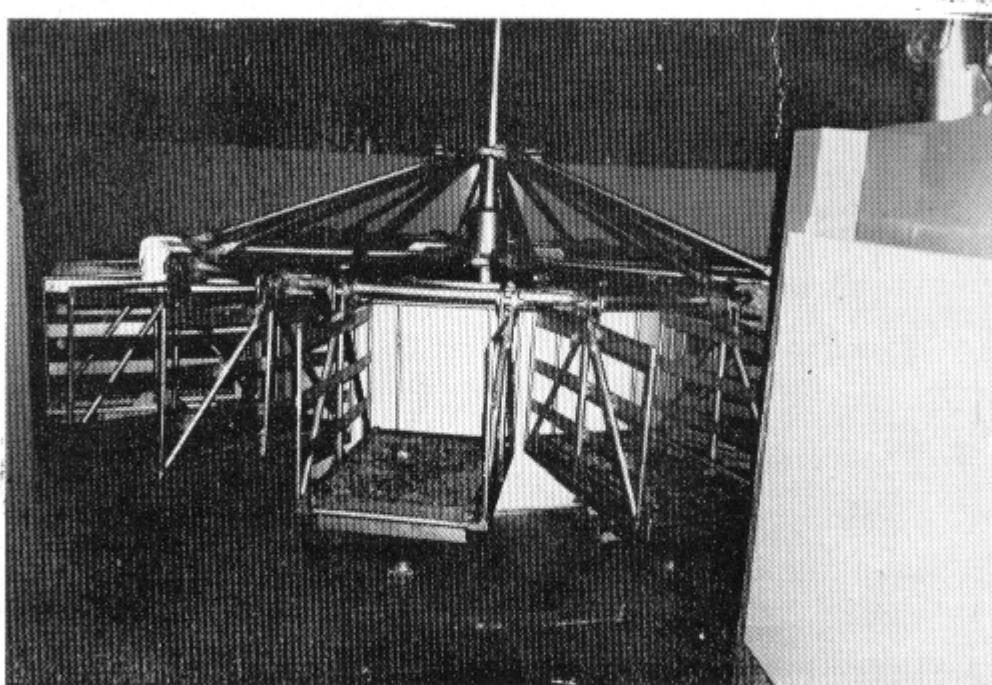
The uncapper in operation. One can see the supers and uncapped fixed frames

Extractor

From the uncapper, the supers go directly to the extractor. Here six supers are put into each of the twelve baskets. They are stacked horizontally and upside down. As the extractor picks up speed, the baskets swing out vertically and the honey is caught in bins at the bottom of each basket. After the extractor is stopped, the honey drains into a tank under the machine.

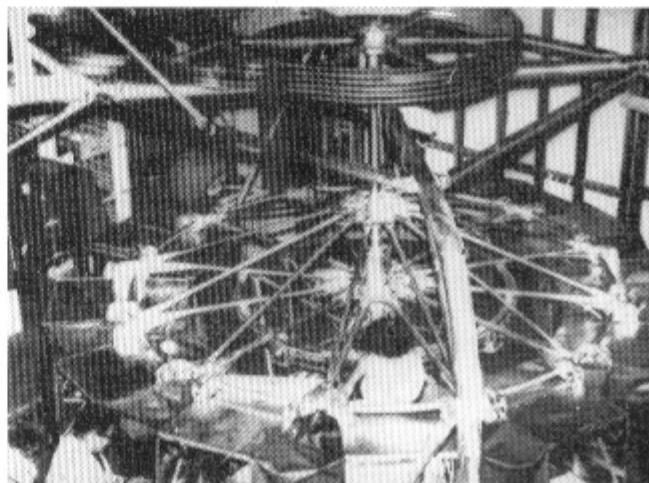


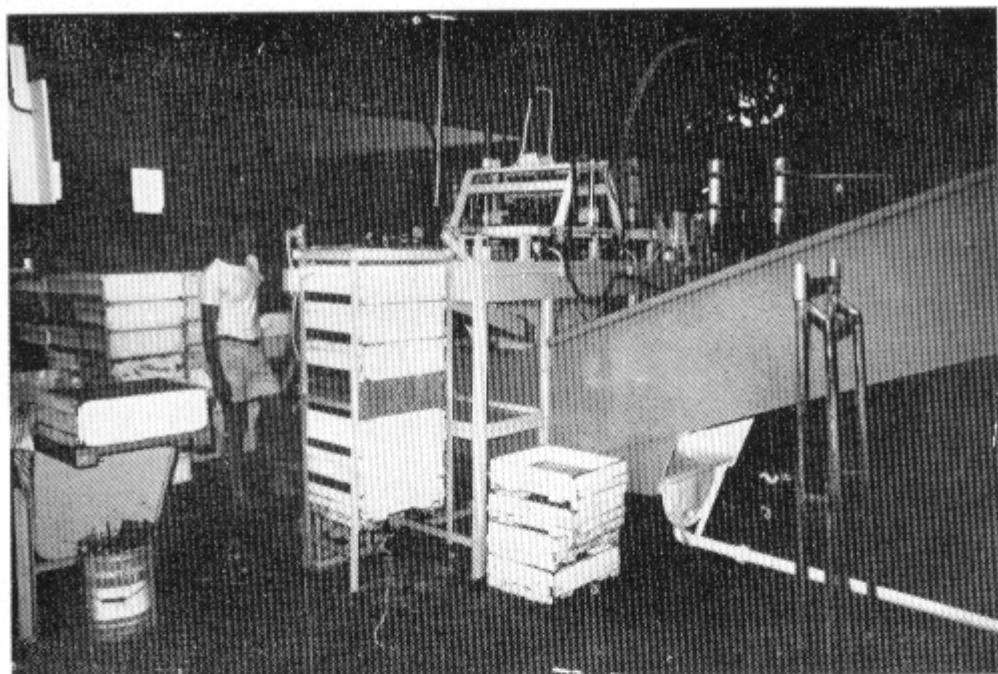
Fox-Harrison Extractor with supers for extraction



Wayne Harrison Super Extractor before being loaded with supers

General view of the extractor

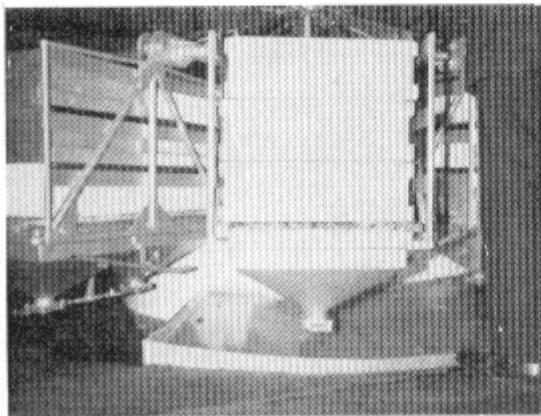




The wax from the uncapper reaches the conveyor belt



Dry (drained) cappings falling onto steam heated tubes



Griddle for 6 supers and draining area. Note twin honey gates and handle under felt-hand cradle

Wax melter

The cappings from the uncapper drop through a grinder and onto a slow-moving, thirty foot endless chain where the honey is allowed to drain for about four hours. Hot air is continually flowing over the cappings while they are on this chain. From this conveyor, the cappings drop on a wax melter consisting of eight foot \times 1 1/2 inch (2.6 m \times 38 mm) pipes circulating hot water. The cappings are moved along these pipes by an endless set of wooden bars. As the wax melts, it drips onto a tray and flows to a separator tank where the remaining honey is removed.

This machinery, we feel, is quite efficient. Two people can put 650 supers per day through the complete process. Therefore time spent in the extracting of the honey is greatly reduced and the beekeeper can spend much more time in the field.