



BILL BUCHANAN, left, shows the old pendulum roller at Beardmore and Co. It still being used but the hydraulic roller on the right viewed by Milling Room foreman Jack Greer can increase production by as much as three times. The high appearance and quality of sole leather depends largely on the operations. (Staff Photo)



THE OLD AND THE NEW methods of shaving leather are shown here by brothers Dick and Ned Dazkovic. Both skilled shoemakers, Dick operates the slower, old 24" machine while Ned runs the automatic 50" wide improvement at the Beardmore and Co. plant. (Staff Photo)



Runs the automatic 50" wide improvement at the Beardmore and Co. plant. (Staff Photo)

New machines modernize Beardmore plant

With 500 employees - 400 in production and 100 in office and supervisory work - Beardmore and Co. is Acton's largest industry and employer.

In the last few years the company has developed into one of the most diversified tanneries in the world. Automation is daily becoming a reality in the three main buildings which occupy 23 acres of the 400-acre property.

Beardmore and Co. chose Acton as a location for a tannery because of the abundance of hemlock bark and good water here in pioneer days. The hemlock bark is no longer a part of the tanning process but good water is still essential.

Beardmore's got their water from three sources: Fairy Lake, company owned springs and from the Town of Acton. Fairy Lake - a company-owned reservoir covering 80 acres - can supply approximately 500,000 gallons of water per day. Company springs and the town are capable of supplying another 250,000 gallons per day from each source. Approximately 850,000 gallons of water are used each day in the plant.

One of the problems peculiar to tanneries is sewage disposal. Beardmore's system which takes up 250 acres has been cited by conservation experts in both Canada and the United States for its efficiency and uniqueness. No effluent is dumped into creeks or streams.

Using 25 miles of irrigation pipe, 650 sprinklers spray one to one and a half million gallons a day onto the ground. There are 30 storage ponds covering 50 acres. Chrome, salt water and tan liquors are pumped on a separate area with ridged furrowing.

From 30 to 40 million pounds of hides a year are tanned by Beardmore and Co. They are secured from the large Canadian packing houses mainly but some come from the U.S.A. and Germany.

By-products from the hides, fleshings cut away in the beamhouse are used for the manufacture of gelatine, glue and fertilizer. Hair from the hides is used for making felt backing for rugs. One hotel in New York required a million pounds of hair felt for an underlay. At two pounds per hide it took 500,000 cattle to produce it.

Tanning time for hides takes from six weeks to six months, depending on the type of leather to be produced.

Hides go from the beamhouse where they are prepared for tanning into the tan yard. There they are bated with enzymes to open the hide for efficient delimiting. Tanning is done in vats with vegetable tanning extracts. Hides are moved from weak to strong liquors progressively one vat forward each day. Quebracho Extract from Argentina, Chestnut Wood Extract from France and Wattle Bark Extract from South Africa are some of the tannins used.

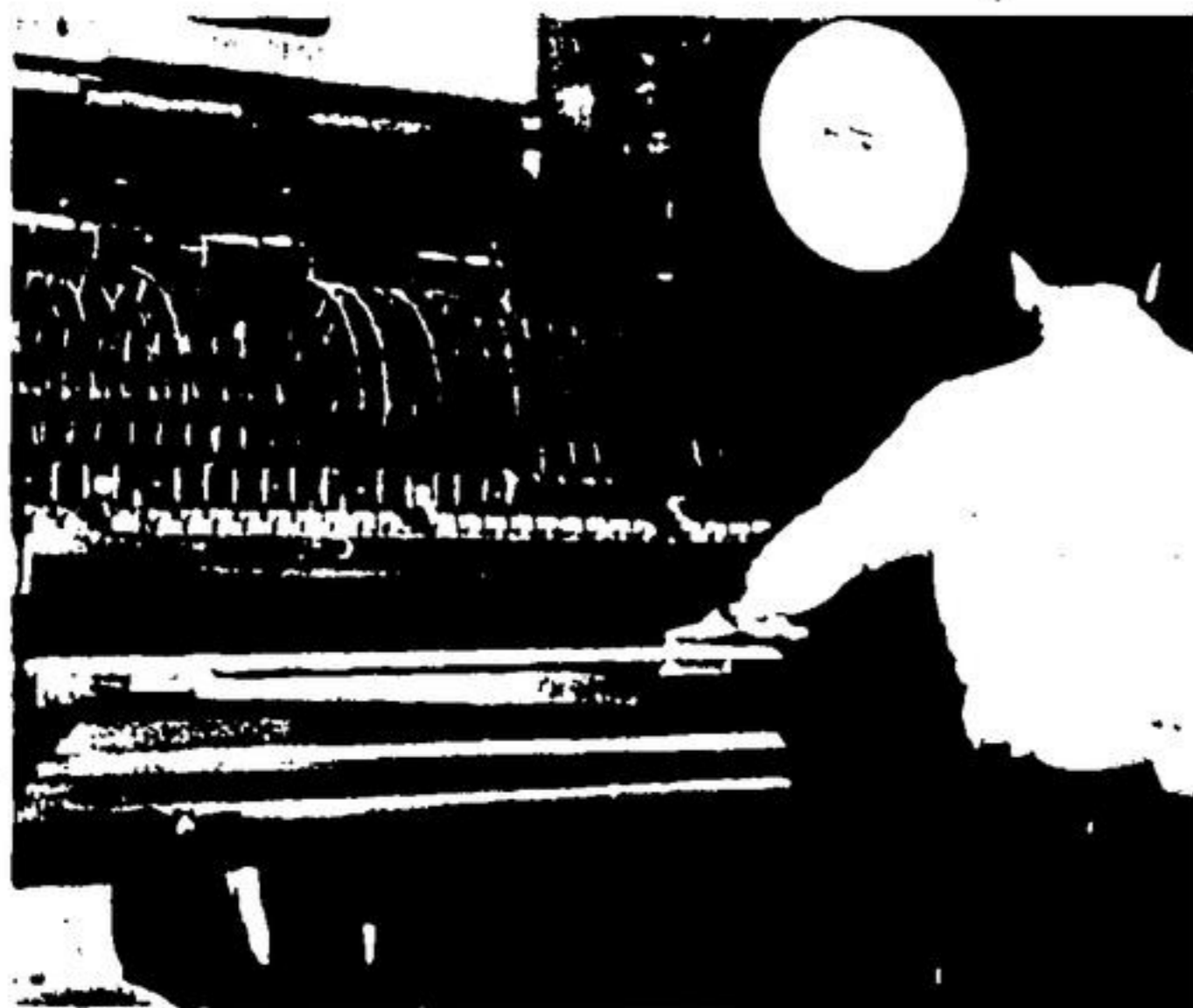
Hides then go progressively to the scrubhouse where sugar, salt and oils are drummed into the leather, to the dry dip where the leather is dried for a week, then to the Curry where specialty leathers are handled.

The final appearance and quality of sole leather depends largely upon the rolling room operator where new hydraulic rollers are replacing the old pendulum type. They increase production three-fold.

Sole leather then goes to the warehouse where finished bends are graded. There are three types of sole leather made - Devon, for men's shoes; Flexolon for women; and Super sole, for army use.

Loggers in the northwest forests use leather called Swiss Loggers' Bonds. Bellies and shoulders are used for insoles. Beardmore's is also unique in that they are the only tannery operating a cutsole department in Canada. About 15 pairs of top soles or 10 pairs of full soles come from each bend as the main part of the hide is known after it is tanned. About 400 different items are made in the cutsole department including insoles, heels, counters, strips, etc.

Another important operational item is chrome.



THE OLD WAY of measuring leather is demonstrated by Ed Parent, left, at the Beardmore plant. It could do 180 sides an hour. The newest measuring machine, right, operated by Mike Thompson and Ernest Leque, can do 450 sides an hour. (Staff Photo)



Working on the photocell principle, it will measure, stamp footage, record footage, add footage and show footage of each individual piece on a screen automatically. (Staff Photo)



THE LARGE CHROME tanning drums at Beardmore and Co. hold 15,000 pounds of hide. Beardmore's pioneered the spin drum and it is widely copied. (Staff Photo)



A TRACTOR TRAILER is loaded with leather products every afternoon at Beardmore and Co. and the load is delivered to Montreal by the next day. Driver Lorne Miller is almost ready to take off for the Quebec metropolis from the Beardmore plant here. (Staff Photo)



DIFFERENCE BETWEEN the old and new methods of finishing specialty leather is illustrated in these pictures with the new and quicker method demonstrated by George (Ben) Bayliss on the right. (Staff Photo)



OLD AND NEW in buffing machines are demonstrated by Charlie Kingsmill, left, and Pat Waidie on the right. The old machine has a 24-inch width - the new one takes 50 inches. It will do 1350 single passes per eight hour day. (Staff Photos)



LEATHER IS SLICKED out to get the maximum footage and smoothness while drying in this operation at the Beardmore and Co. plant. This machine took the place of the old time tacking boards and drying time takes four to five hours. (Staff Photo)



HAND SPRAYING IS DONE by Mrs. Owen Massale while the modern spray machine which does the work automatically is fed by Mrs. Sonny Townsley. (Staff Photo)



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