



FURS FOR BELOWS

THE HARVEST OF THE NORTH



R. BEVERER '35

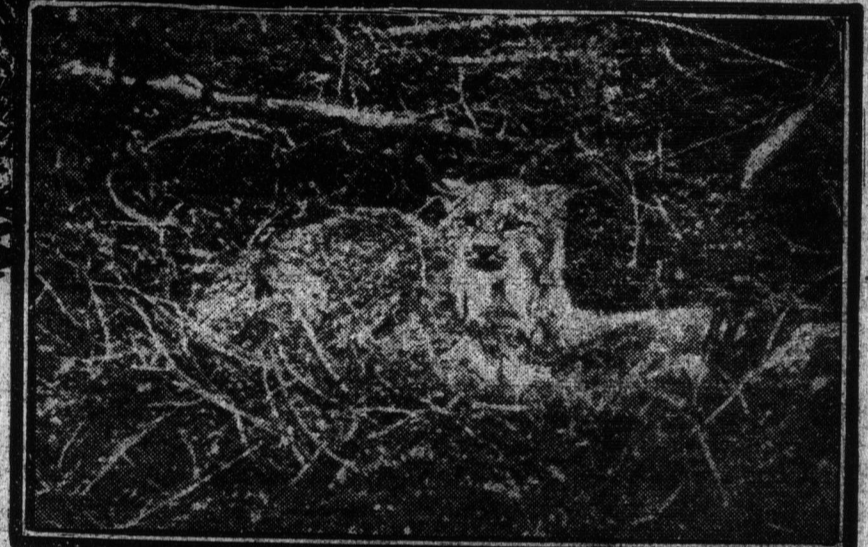


HOW PELTS ARE BROUGHT DOWN COUNTRY.

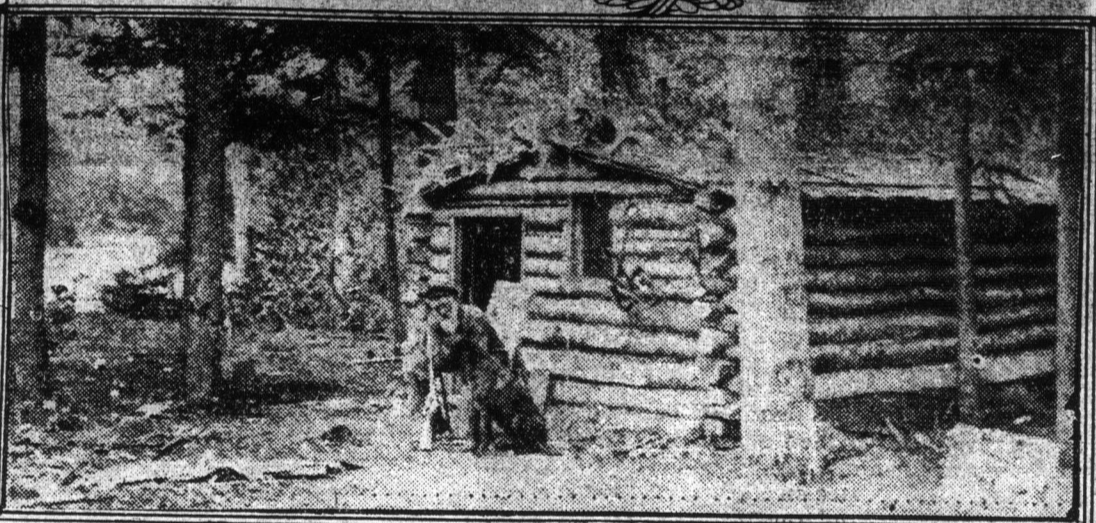


R. TRAPPER SKINNING A COYOTE

A TRAPPED LYNX



R. TRAPPER AND HIS SHANTY



THE BEAR HUNTERS' CATCH

Go along Government street any day and you will see fashionably dressed women wearing anywhere from fifty to five hundred dollars' worth of furs. Look into some of the shop windows and thousands of dollars' worth more meet your gaze. They are made up in the form of wearing apparel, mostly female wearing apparel; they are not constructed primarily for warmth, for Victoria enjoys a very mild winter climate, and, excepting very few days in the year, fur garments are superfluous and more uncomfortable than otherwise. Yet fur is fashionable. That is the reason for it all. Fur is fashionable, not only in outer garments, but as trimming for ball gowns and even for underskirts. It is being worn more than ever before, and notwithstanding the fact that more imitation furs are being turned out this season than ever, the demand is steadily increasing.

Some time soon, say those who ought to know, the pace must slacken. Steps are being taken now to protect some of the fur-bearing animals whose pelts are eagerly sought for the keen hunting which must, otherwise, result in their extermination. The "fur line" is receding steadily northward; trappers are finding it increasingly difficult to obtain furs, and the pelts of some animals have become so rare as to be immensely valuable.

The approaching coronation ceremony, as it happens, emphasizes the shortage in one variety of fur—ermine. So scarce has this become, it is reported, that it is impossible to secure sufficient to fill the demand; it is expected that the traditional royal robe will have to be omitted in some instances at least.

Much has been written about the romance of precious stones and gold, but it is not so well known that the romance of fur does not outstrip them far. Sometime, when most of the precious furs are no longer obtainable and the trappers are carefully piecing together the scattered remains of the long-extinct beaver, ermine, or fisher, a writer will arise who will tell the story of fur, and it will be a great story.

There are residents of Victoria today who could help build up some of the earlier chapters, and men on the northwestern frontiers who are tending their traps might furnish material for some of the latest.

Fur-bearing animals are found in many countries and under different conditions, and in accordance with various customs the systems of taking them differ. In the last analysis, however, all systems work out to the same issue—the scalping of the hunted. The Northern Canadian Indians are perhaps the

finest trappers in the world. Their natural ability as woodsmen and their ability to withstand the severe winter weather of the north and the loneliness of the silent places, together with their cleverness in setting snares and bait and their knowledge of the animals they seek, made them successful where the white man often fails. Statistics for 1909, to hand, show that the Indians of Canada, during that season, netted \$828,221 from their fur catches, an increase of \$221,387 over the previous season. This increase in itself is a significant commentary on the growing keenness of the chase.

British Columbia took second place in 1909 in the Indian fur catch. Saskatchewan led with \$192,942 worth, while this province contributed \$180,190.

The principal fur-bearing animals taken in Canada at the present time are, fox, of the blue, cross, red, silver, white and black varieties; wolverine, otter, lynx, bear, mink, marten, beaver and muskrat. Of these the fox skins are the most valuable, a single silver skin having been known to sell for \$1,700 on

the London market. The white and blue phases of the Arctic fox are the winter dress of different animals, not the winter and summer coats of the same animal. The white fox is found all over Canada from the fiftieth parallel or, on a level with the south shore of Hudson Bay to as far north as animal life is found. The black fox, skins of which have been known to sell for \$4,000 in St. Petersburg, is a rarity, and the cross fox is not a hybrid, but the species which bears the mark of a cross upon its shoulders.

The beaver, which was for many years threatened with extermination, owing to the wholesale methods of slaughter employed by the trappers, is again taking its place in the market. The beaver is by reason of its winter habits particularly easy to capture. The Indians take advantage of the beaver's peculiar characteristics to catch whole colonies of the animal, driving stakes above and below the beaver house. The little animals are then frightened out of their lodge by beating it with a hatchet, and a trap is set at the water entrance to the house so that on returning they

are caught: The banks of the stream are carefully watched and any holes that may exist are noted. The beavers are again frightened out of these refuges and caught through holes in the ice by means of a hook and pole.

The romance of fur is world wide, for fur-bearing animals come from many different countries. All over the world, in the lonely, dangerous places, sturdy men are enduring privation, hunger and even death, and countless animals, big and little, are giving up their lives to provide something new and fashionable for my lady.

REMARKABLE MACHINE PREDICTS TIDES.

Writing in "Popular Mechanics," T. W. Lewis gives an interesting account of a machine recently completed in the United States which mechanically predicts tides. Mr. Lewis says:

"One of the most important functions of the United States Coast and Geodetic Survey is to give accurate information to the navigator, the engineer engaged in harbor and river improvement to the hydrographic surveyor and to many others, of the rise and fall of the sea along the coast, due to tidal forces. This information is furnished in the form of a book published annually showing the exact time of the high and low waters and their heights, for every port in the United States and the principal ports in other countries.

Today the United States government leads all countries in the world in tidal forecasts with a recently invented machine. Formerly this work required the employment of 65 computers for two or three days to figure out a year's forecast of tides for a given place. Now, one man sits down to a machine, all hung with wheels and pulleys, turns a crank and grinds out a tide table for any point for which the machine has been adjusted. The machine was made by two officials of the survey. Its perfection was not reached until after 14 years of hard work and study, and it cost the government, in time and material, the sum of \$15,000.

The furnishing of the printer with copy for a tidal calendar, put out for distribution from one to two years ahead of time, involves an amount of computation so vast that the use of mechanical devices has long been recognized as necessary. About 1875, Sir William Thompson (Lord Kelvin) invented a machine for predicting tides. It produced a curve on a long strip of paper from which the times and heights of high and low water could be scaled off. This machine, it seems, has never been used in the regular prediction of tides and is now on exhibition in the South Kensington Museum. Some time later, E. Roberts, of the British Nautical Almanac office, had another machine constructed upon nearly the same plan, but larger and with some improvements.

In 1881, there was constructed for the United States Coast and Geodetic Survey a tide-predicting machine after general plans furnished by Prof. William Ferrel, at that time attached to the survey. It indicates, by a system of dials and pointers, after being set for the time elements of the selected station, the day, hour and minute of each high and low water. These are recorded by the operator. The machine is then reset for obtaining the heights in feet and tenths corresponding to the previously recorded time. The annual tide tables published by the survey since 1883 were made up from the predictions made upon this machine.

Various shortcomings of this machine, as well as the desirability of utilizing more accurate and increased information regarding the constituents of tidal fluctuation, led Dr. R. A. Harri, a member of the Coast and Geodetic Survey, to recommend the design and construction of a new machine. He furnished the theoretical data for solving mechanically a formula which will yield at one setting the heights and times or, in other words, show

accurately the height of the tide above any base line at any instant. The general and detail designs of a machine embodying these data were made by E. G. Fischer, chief mechanic of the survey.

A chain, fixed at one end, is lengthened and shortened successively at its free end by pulleys, each representing one of the constituents. These pulleys are moved up and down by means of cranks fastened upon shafts to which motion of the required speed is imparted by means of bevel gear wheels.

The effect, or amount of the influence, of the various tidal forces, each of which is thus represented by a separate mechanism periodically lengthening and shortening the free end of the chain, is obtained for each particular station by setting the crank pins to the required amount of eccentricity upon a scale provided for the purpose.

It will be seen that when all the component mechanism are put in motion by the hand-crank, shafts and gear wheels, suitably arranged for the purpose, each one moving at its own rate of speed and its own amplitude, some lengthening, some shortening the chain laid alternately over and under the pulleys, the free end of the chain, suitably weighted, will move in such way as to represent at any instant the sum of all the components.

In front of the large brass plates carrying the component shafts, their gears, pulleys, chains, etc., is placed, suitably mounted on two brass plates, a system of dials with their shafts and gears, and a surge-tracing apparatus. The free ends of the two chains, one of which may be named the height and the other the time chain, are connected with these dials in such manner that the motion of the former is shown by a pointer oscillating around a circular scale representing feet and tenths, indicating the height above or below a selected base line. The time chain is carried between the plates of the dial, and is seen through an opening in the front to move back and forth when the machine is set in motion by a hand-crank at the left of the operator, who sits facing the dials.

The turning of the hand-crank also sets in motion the pointers of three dials, one showing the day of the month; one, the hour, and a third, the minute.

The extreme length of this wonderful machine, including the operator's desk, is 11 ft.; its extreme height, 6 ft., and its width, 2 ft.

The time of setting the machine for predicting a tide, including checking, is from 2 to 4 hours; that of predicting and recording the high and low waters for a station for one year, from 10 to 14 hours. The machine can be adjusted, and a whole year's prediction as to what the tides will be at a given point can be recorded and tabulated in half a day by one man. There are but four such tide-predicting machines in the world.

The tidal forecasts for the years 1911 and 1912 have already been computed, and the work of preparing the 1913 forecast has begun.

It has been suggested that Prof. Willis Moore's job of chief weather forecaster might be made a perpetual round of joy, free from the dread of unforeseen flaresbacks, if some inventive genius could catalogue the meteorological influences, as the tidal observers have done with their mysterious elements, and then reproduce the effect on a weather-predicting machine.

MEESTER MARKA TWAIN

Dey say eet was hees job for joke
An' poka fun at seempla folk.
I don'ta ondrastan'.
I nevva read w'at's een hees book;
I only see da way he look—
I only know da man.
An' evra time he passa by
He show to me so kinda eye
Ees beautiful to see;
For dough I'm domba Dagoman,
So strange, so queer een deesa lan,
He nevva laugh at me.

An' dey dat say he only joke
An' maka fun weeth seempla folk
Ees mebba so, dey lie.
Ees mebba so dey no could see
How moocha sweeta charity
Ees smila from hees eye.
An' now dat he ees gon' an' change
For' nudder land dat eesa strange
To heem as eet can be,
I can daylieve day dere are kind
To heem, poor stranger, as I find
Dat here he was to me.

—Catholic Standard and Times.

GO IN LONG CARAVAN TO SEEK HEALTH.

A novel plan for treating tuberculosis is to be given a trial by an Indiana man who has organized a caravan that will include two automobiles and 12 vans to tour the states of Kentucky, Tennessee, Virginia, North Carolina, South Carolina, Georgia, Alabama and Mississippi during the winter. There will be 50 persons in the party which was organized by the father of a child afflicted with the disease. The patients will have the advantages of out-of-door life and a winter in the South without the vexing routine of a sanatorium. Nurses, cooks and physicians will accompany the party. The trip will be made a pleasure tour as well as an expedition in search of health.

REFERRED TO DR. SIDIS

"Infant prodigies are hard to understand," said the man who is easily impressed. "I don't think so," replied Miss Cayenne. "As a rule they are simply young children with highly imaginative parents." — Washington Star.