Amazing Races Against Time

The recent remarkable performances at Southampton in coaling the White Star liner Homeric by hand in record time, and in refitting the Majestic for her trip to New York in about thirty working hours, stand out as conspicuous examples of what can be accomplished when human energy as well as mechanical appliances are put to the test against time.

Although the present age excels in the art of hurrying in matters in which machinery is used, it is surprising how smart our ancestors in the early part of the last century could be when occasion necessitated their "getting a move on."

For example, in 1837, when wool was spun on the old jennies and woven on hand-looms, a jacket and vest were completed at Ettrick Mills in sixteen hours; but in 1816, an American paper having recorded that "at a woollen factory at Holliday Cove the wool shorn from the back of a sheep in the morning was washed, carded, spun into yarn of eighteen cuts to the pound, woven, dyed, fulled, dried, shorn, and made into a coat and worn, all in the space of twenty-four hours," the same feat was performed in England in twelve hours and twenty minutes. Subsequently a Canadian firm accomplished the work in nine hours and a quarter.

There is the well-known case, too, of a Berkshire baronet who bet a hundred guineas that he would dine at seven o'clock in a suit of clothes made from wool which had been growing on the sheep's back the same day.

As the bet was covered, the exponent of the art of hurrying directed that operations should begin at 5 a.m. with the washing of sufficient sheep to provide the wool. From a neighboring factory the wool was returned as cloth late in the afternoon, but early enough to permit of a tailor and his assistants completing the suit by 7 p.m., in plenty of time for the baronet to don it preparatory to sitting down to his evening meal.

At one time the Great Eastern Railway Company performed the feat of building a locomotive and tender of the goods type in nine hours forty-seven minutes.

In shipbuilding yards and other constructive industries one sees work speeded up by the use of pneumatic and other tools for which modern science is responsible, and road construction and repair work has been greatly accelerated recently by the use of mechanical appliances.

The papermaking trade can boast of some famous feats in the way of quick work. On one occasion three trees were felled at 7.35 a.m., and hurried to a factory, where they were sawn into pieces about one foot long.

They were then conveyed to five defibrators. The wood-pulp was run into a vat, mixed with the not altogether harmless but quite necessary chemicals, and the process finished; the liquid pulp was sent to the paper machine, which at 9.34 turned out the first completed sheet of paper, one hour and fifty-nine minutes after the first tree was felled.

The manufacturers then took the paper to a printing establishment two miles away, and by 10 o'clock the trees had been converted into newspapers ready for delivery.

Shoe manufacturers, too, display wonderful keenness in beating records.

In the United States shoes have been made in sixteen minutes; in the Midlands of England in twenty minutes; and at the Agricultural Hall, Islington, when the leather passed through fifty-three machines and required the attention of sixty-three people, in thirty-five minutes.

ADVANTAGES OF CANADA'S CLIMATE

LIGHT RATHER THAN HEAT MAKES PLANTS GROW.

Human Energy Developed to Highest Degree in North Says Stefansson.

With the shortening fall days and the approach of winter months, once again arises in foreign publications arguments and opinions as to the desirability or disadvantages of Canada's climate.

We who live in Canada are quite satisfied with our winter climate; we know it is both desirable and advantageous, and that without it we could not hope to raise the finest hard wheat in the world and the splendid crop of sturdy, healthy, young men and women. Farmers know that bracing cold weather puts bone and muscle, fat and hide on horses and cattle; lumbermen and trappers that snow solves their transportation problem; while to the lover of outdoors sports, winter time in Canada is a season to be anticipated. Finally, vital statistics bear out the fact that nowhere in the world will a healthier class of children be found than in Canada, and the state of health of the younger generations is the very best indication of the advantages of the climate.

In a very eulogistic article on Canada in the October issue of the International Bulletin published by the International Institute of Economics of New York, one of Canada's great drawbacks is stated to be the climate. "Cosmopolis," who writes the article, says:

"Canada's chief disadvantage is that her farther northern climate renders her products less diversified than America's—by which he means of course the United States—and grips great areas in frosts that forever forbid cultivation of them."

On the face of it, this would seem to be fact, but it would be difficult to convince Stefansson and other recent Northern explorers of this fact. "Forever" as applied to cultivation and living conditions in Canada is a doubtful word, for, as time goes on, conditions in Canada change, and with further northward cultivation and colonization the so-called Arctic climate is being driven farther North. To any who have read Stefansson's article on climate in the February, 1922, World's Work, 'The Livable North,' the following quotation will be familiar; to those who have not read it, it will be of interest.

Old Beliefs Broken Down.

Before quoting from that article, however, let us just joint out that this question of excessive Arctic climate and unproductive Northern areas is fast losing its foundation. Settlement in the Peace River country, in Northern Ontario and in Quebec, is going on apace, and areas that, like the Northwest, were once considered uninhabitable and uncultivable, are now proving desirable and productive. Back in the early nineties, wheat grown a thousand miles north of the international boundary took first prize at the Chicago International Exhibition, since when settlement in that area has been steady and expansive. When Canada is possesses of a population of eighteen millions instead of eight as at present, this question of uncultivable Northern areas owing to excessive climate, will have faded just in the same way as the question of the fertility and livableness of the Northwest faded with time and experimentation. But let Stefansson speak for himself:—

"We have pointed out that the growth of grass and other plants is measured not by the length of the summer in months, but by the number of hours of sunlight, and that there are as many hours of sunlight in three months of Arctic summer as in six months of tropic summer, giving the plants, therefore, in reality, twice as long a growing time as the careless reasoner assumes them to have. This is one of the fundamental considerations which explain the universality and luxuriance of vegetation in the North that is always so startling to the traveller who goes North with a mind furnished with ideas derived from school geographies."

"It seems to be light rather than heat that makes a plant grow fast. But if it were heat, the polar plants would not be badly off. A fairly simple mathematical calculation shows that from the first week of June to the second week of July, the earth at sea level receives from the sun more heat per square mile per day at the North Pole than at the Equator. In mountainous regions, such as Greenland, there is left over from winter, stored snow to counterbalance locally this tremendous downpour of heat; but on the far more extensive polar low-lands of Siberia, Canada, Alaska and the Canadian Arctic islands, there is no stored-up snow to temper the summer heat, which explains the stories travellers from these regions tell of the unbearable swelter of the Arctic summer and explains such weather bureau records as 100 degrees in the shade at Fort Yukon, Alaska.

Examples of Unconscious Humor.

"The speeches in Parliament of Sir Edward Blake and others are now classic in Canada and are there the best known examples of unconscious humor. The English language was taxed to its capacity in showing the obsurdity of the building of the Canadian Pacific Railway. The argument said in substance that the expense of building the road would be so great that, even were we to accept the most optimistic view of what the resources of the Prairie Provinces might develop into, even so a reasonable freight tariff for carrying them to the Atlantic would never pay for the axle grease of the freight cars. Opponents of the road were willing to concede that if anybody had the incredible folly to squander that much money the road could be built. They admitted further, that it could undoubtedly be operated in summer, but submitted that it was preposterous to suppose that it could be operated in winter, and there followed the self-evident conclusion that the railway could never be profitable, for 'no enterprise can be profitable if it is operated only half the year.' "

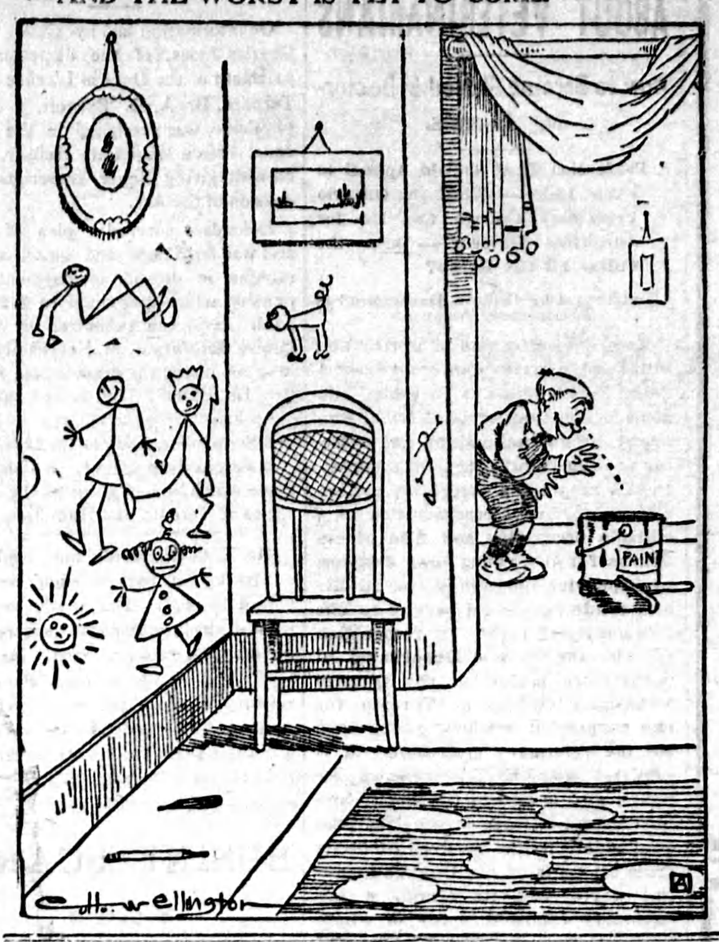
"It is hard now to realize that this argument was applied in good faith to the district which is now, with some justice, called 'The Bread Backet of the World,' and to a railway which is commonly conceded to be the greatest of all railway systems.

"Human energy, mental and physical, is developed to the highest degree in the Northern climates. It may also, in some cases, be developed to a high degree in Southern countries, notably on plateaus and where the sea breezes blow freshly. We need not go into any such elaborate arguments as those of Ellsworth Huntington's book 'Climate and Civilization,' to prove to any thoughtful man that so long as we have a competitive civilization and so long as public opinion continues to allow the energetic and the powerful to take whatever they wish from the lethargic and the weak, so long will the North continue to dominate the South as it is doing to-day, for it produces the one crop that matters—men of unsleeping energy and restless ambition."

PICKED UP ACTIVE SEA MINE

The fishing vessel Scorpio recently picked up a live mine in its nets off Scarboro, England. She was taken to harbor and isolated while the firing apparatus was removed. The mine and the extracted mechanism are shown in the picture.

—AND THE WORST IS YET TO COME



Twice Nothing.

Thomas was not the brightest specimen on earth, and, try as he might, he could not succeed in obtaining a situation.

At last a bright idea occurred to him. He would offer his services free for a fortnight.

On these terms Mr. Ikey Fingelstein engaged him.

The fortnight having expired, Thomas asked for a "rise."

'Vat is your present salary?" asked Fingelstein.

"Nothing, sir," said Thomas.

Mr. Fingelstein contemplated the lad.

"Vell, my poy, your vages is doubled!"

And Thomas was quite satisfied—until he had had time to think over the generous offer.

Unexploded shells, bombs, and other "live" war souvenirs to the number of 6,600 have been picked up in Paris streets since the beginning of this year; it is suggested that owners of these dangerous articles are "dumping" them to get rid of them.

A Man to Admire.

The factor of Barriere Post, Hudson's Bay Company, is an exceptional man. After reading Mr. Ralph G. Stoddard's article in Outing, we should say that the factor—his name is Alston—probably would do well anywhere—either among the polar bears and Indians of the ice floes or among the lions and blacks of the jungles.

One winter evening, writes Mr. Stoddard, the factor, who was returning to his store, noticed that something, apparently a large dog, was following him. When he looked round again he thought that the animal was rather big for a dog. And it seemed to be coming pretty close to him. Then he understood. It was not a dog; it was a polar bear!

Alston had no weapon of any sort with him; he had nothing except his lantern, and he knew that if he tried to run, or if he showed any signs of fear, he was lost. So, turning round, he walked toward the bear, waving the lantern in his face. The bear reared on its hind legs and waited till he was only a few feet away; then it dropped to all fours and sauntered off—bluffed!

But Alston also knows how to "call a bluff." Once during a very cold winter he visited some Indians who were perhaps eight days' journey from Port Nelson; with him he took three of his own Indians, two men and a boy. When the time came to start back one of the Indians whose name was George complained that he was not feeling well and said that he was not ready to start. Alston was satisfied that there was nothing the matter with the fellow, but that he simply wanted to stay and visit a little longer with the Indians at the encampment. So he said to him, "All right, we shall return without you."

The first day after the three had left the encampment the Indian boy came to Alston with a small bag that contained about one day's rations. "That is all we have," he said.

"Why is that all we have?" demanded the factor. "I laid out plenty of provisions."

"George take them," was the answer.

"Did you see him take them?" asked Alston.

"Yes."

"Well, then, why didn't you tell me?"

The Indian boy had no satisfactory answer to give; it was evident that he as well as the third Indian was playing the game with the one who had stayed behind. They had supposed that Alston naturally would return when he found that he had no provisions, for the temperature was down far below zero.

But Alston knew that if he did turn back his prestige with the Indians would be seriously injured; so he took the provisions and divided them into three portions. "Now," he said to the two Indians, "take your pick. We are going to Port Nelson. I want you to realize that when a white man sets out to do a thing he does it!"

They made the journey in bitter cold weather in four days with only one day's provisions and arrived thoroughly exhausted at Port Nelson. The Indian man had a frozen foot. What a pity it could not have been the Indian who had remained behind!

A Slight Error.

A traveller rushed up to a stranger on a railway station just as the train was about to start, and asked:

"Are you going on this train?"

"I am!" was the reply.

"Well my friend," said the traveller, "you might do me a favor. I have two big trunks, and they always make me pay extra for one of them. Would you mind taking one, it will cost you nothing!"

"But I haven't a ticket!" said the stranger.

"I thought you said you were going by this train?" exclaimed the traveller.

"Yes, I am!" was the answer. "I'm one of the company's inspectors!"

The Language of Bees.

Can animals and insects talk to each other? A German scientist, Professor Karl von Frisch, when making tests on bees, discovered many interesting facts about the system of communication adopted by these creatures.

He placed a dish of sugar solution on a table by an open window. A bee came along and, having stolen as much as he could carry, flew away. Before long the dish was covered with bees.

The sugar was removed and most of the insects disappeared. When the dish was replaced, the swarm returned. By touching the back of each bee with a spot of color, it was discovered that the later arrivals were not escorted by those who had been before, and it was concluded that they must have been sent.

The next step in the investigation was to study the behavior of the bee which had discovered that the sugar had been replaced in the window. When the creature returned to the nest it handed over its load of sugar to the workers, and then executed a curious dance, describing circles and other figures. The other bees watched carefully, and attempted to touch her. When one of the bees which had been marked succeeded in this, it flew out immediately and went to the sugar. The unmarked bees soon ceased to pay any attention to the discoverer of the sugar.

Then the experiment was repeated with two dishes, one white and one yellow. Both were filled with sugar and left in the window. The bees were marked with white or yellow, according to the dish to which they flew. The dishes were removed and the white one emptied. Afterwards both were replaced in the window. The full dish was discovered by a yellow bee, which returned to the nest and repeated the dance. Both white and yellow bees then flew back to their dishes, the white ones of course, finding nothing waiting for them.

All this showed that bee language is able to convey information as to the presence of food, but that it cannot describe the position of the find unless the place is already known to the recipient of the message. The language is obviously founded on touch rather than upon hearing.

Making Ends Meet in Music Education.

The problem of making "ends meet" while continuing their education in music is often the most pressing question which confronts the students of to-day. Yet many times the very people who need it most pass by an opportunity at their doors and going farther afield to make money fail dismally.

As one instance: In the city of Ottawa there is a good conservatory with efficient teachers. Just twenty miles or so away on the line of the railroads is a little village that is the centre of a flourishing farming community, and in this village a class of twenty-four pupils waits in vain for a teacher to take the place of the one whom they have lost. Each of these pupils is willing to pay fifty cents for a half-hour lesson, while one family in the village offers free board and lodging for a day and a night each week to any teacher willing to go from the city to give lessons to the children. The railway fare to and from this village amounts to one dollar and fifteen cents. This leaves a profit of ten dollars and eighty-five cents for approximately one day's work. Almost the same story with the same inducement for a teacher holds good of another village in a different direction up among the Gatineau Hills, but it would not be quite so convenient for a student to go there as to the first place. It might, however, be well worth while.

Fifty cents a lesson may not be much to some teachers, but then what about the opportunity for rendering real service to those children who are still looking for their music teacher? There must be many other little villages in Canada in need of help from the music teachers.

What about it? Are we going to neglect our little friends in the rural districts of this great Dominion?

Tobacco takes its name from the Island of Tobago in the Caribbean Sea, where it was discovered, but "nicotine" was the name first given to tobacco in France through the introduction of the herb to Catherine de Medicis by the Ambassador to Lisbon, Jean Nicot.

Poisons You Eat Every Day.

How many people who were startled by the recent epidemic of food poisoning realize that daily most of us consume poison with our meals?

Bacon, for example, which figures on most breakfast tables, contains a small amount of saltpetre; it gives the rind its coloring. Take a dose of an ounce or so of saltpetre, and even if you do not die you will have a decidedly uncomfortable time.

An ounce of saltpetre has been known to kill a person in two hours while medical records contain numerous instances of people having been made very ill by mistaking this substance for some other form of salt.

Mention of salt brings to mind the little known fact that a favorite Chinese method of committing suicide is by taking a cupful of the common table variey. In any more than small quantities salt is a violent gastric irritant, one of the effects of which is the setting up of fatal inflammation of the stomach.

Another salt of which most of us partake fairly freely at some time or other is oxalic acid, a distressingly powerful irritant and poison when taken in sufficient quantities. It is found in rhubarb and sorrel, and gives both their pleasant thirst-quenching flavor.

Bloaters and kippers are not infrequently preserved in a preparation containing formaldehyde, which is liable to bring about stomach trouble and sometimes worse effects. The amount used in curing fish, however, is so small as to be almost negligible.

Even your iced Christmas cake cannot be absolved from the charge of being poisonous in a slight degree. That delightful almond flavor, appreciated by most people, is a sign of the presence in the icing of prussic acid, less than one ounce of which is sufficient to kill two or three people in a very short time.

Many of the cheapest kinds of jam contain arsenic, as do inferior brands of sweets and confectionery.

Then, again, such familiar items as cloves, nutmegs, horse-radish, and certain herbs are poisonous if taken in large quantities.

Black pepper contains an alkaloid poison known as piperine, while the cayenne variety, better known perhaps as red pepper, is even more potent as a poison.

A case was reported in which a woman swallowed half an ounce of cayenne pepper and died in agony a few hours afterwards.

All doctors agree that over-indulgence in tea or coffee, owing to the caffein these drinks contain, is decidedly injurious to health.

On Crusoe's Isle.

A holiday on Robinson Crusoe's island will be possible in the near future.

The charming little island of Juan Fernandez, where Alexander Selkirk spent four years of his life, and whose story led Defoe to write his famous masterpiece, is to be transformed into a holiday resort.

It belongs to the Chilian Government and can be reached by steamer from Valparaiso. The island is thirty-six square miles in extent, and is heavily wooded with splendid tree ferns, orange trees, myrtles, and sandal wood. It is mountainous, and full of ravines and torrents. Crowds of wild goats roam through the underwood, and myriads of humming birds chat among the ferns. The climate is said to be ideal.

At Cumberland Bay, where Selkirk landed, is the island's only hamlet, San Juan Bautista. A modern hotel is to be erected here, and a bi-weekly-steamboat service is to be run.

Naturally, the great curiosities of the island are the places where Robinson Crusoe, according to the story, passed the best part of his life. First there is the grotto where he made his dwelling; it is carpeted with ferns and climbing plants. All around it grows the pologony, a curious plant, from whose gigantic leaves he made his crockery—plates, dishes, soup tureens, and even washing basins and tanks. There is the little bay in which he used to moor his boat, and the plateau on which he built his cabin.

An Ideal Memory.

Mrs. Exe—"Does your husband remember the anniversary of your marriage?"

Mrs. Wye—"Never; so I remind him of it in January and June and get two presents."

QUAINT ELECTIONEERING IN ENGLAND

Mrs. J. Tudor Rees overcame the difficulties of electioneering in the unique fishing town of Clovelly by climbing its steep streets on a donkey. The picture shows how the streets are built.