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Machines That Are Almost Human By E. C. TAYLOR

The "Thinking Machine"

DROBABLY the nearest approach to a machine that can think for itself is a device in the Massachusetts Institute of Technology in Boston Mass. This machine has the power to rapidly and accurately solve problems in higher mathematics that are beyond the powers of the human brain as yet demonstrated. Its technical name is the Michelson-

Stratton harmonic analyzer and was invented to aid Prof. Charles A. Michelson of the University of Chicago in his studies of the speed and curves of light.

This wonderful machine won't have anything to do with problems in simple arithmetic or algebra. But it dotes on calculus, that highest branch of mathematics which is a short cut in solving problems by means of mathematical equations.

Any problem can be submitted to this machine, and the correct answer will be forthcoming in a few minutes. It would take human beings anywhere from a month to a year to get the answers to these same problems, provided the human being could get them at all, and the machine is absolutely accurate. It eliminates weeks and months of intensive thought. Think of the saving it effects in the wear and tear on the brains of scientists and engineers!

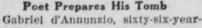
All engineers must know accurately beforehand that if certain work is done in a given way, it will produce the result they desire. This often necessitates a waste of time, labor and materials.

Scientists themselves call the Michelson-Stratton device a real "thinking machine." It takes almost any differential equation of the second order in calculus and by a combination of mechanical and electrical means perfects the computations. It does this beyond the power of the human brain so far demonstrated. And it does it in from five minutes to half a day. where it would take expert mathematicians from weeks to a year to attempt to get the answer.

The mainspring of the device is the common meter by which the flow of electric current into homes and factories is measured.

The problems to be solved are submitted to the machine as questions in the form of calculus equations. Each equation is written on a separate piece of paper, and one operator is at hand for each question asked. These sheets of paper are fastened

to a series of moving tables above which are mounted pointers which can be moved perpendicularly to the tables and which increase or diminish the flow of electricity through the meter. The meter traces a curve to show the result as the tables move under the pointers, and it is a simple task for mathematicians to translate the curve into the mathematical equation that is the answer to their problem. One of the first problems placed before this remarkable machine proved its value to scientists and engineers. An engineer had drawn complete plans for a new type of electric motor. He wanted to know all about its performance in advance. So he asked the Michelson-Stratton harmonic analyzer. The machine was asked how fast the motor could go; the best speed at which it should be operated ; how long it would last if operated at different speeds, and similar questions that naturally arose in the mind of the inventor. The questions were placed in the machine, the tables moved, the curve was drawn, and the engineer had his answer. The machine replied to them all, and told him in a short time how his motor best should be built and best operated. Tests of the actual motor made during the next two years showed that the machine was absolutely accurate in its answers. This is the only machine of its kind



old Italian warrior and poet, sent a telegram to Rome stating that his order for a mausoleum was most urgent. This picturesque son of Italy now lives in his Villa Vittoriale near Gardone, where he spends most of his time in a study into which no visitor is admitted. Some time ago he decided that he desired to be buried near the villa under a tomb consisting of four massive columns surmounted by the statue of a racing greyhound. His friend, Renato Brozzi, was selected to sculpture the statue. D'Annunzio has provided in his will that Vittoriale is to become a national monument after his death.

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Sour stomach, indigestion, gas, usually mean excess acid. The stomach nerves have been over-stimulated. Food sours in the stomach.

Correct excess acid with an alkall. The best form of alkali is Phillips' Milk of Magnesia. It works instantly. The stomach becomes sweet. Your heartburn, gas, headache, biliousness or indigestion has vanished!

Phillips' Milk of Magnesia is the pleasant way-the efficient way to relieve the effects of over-acidity.

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Dr. Pierce's Pellets are best for liver, bowels and stomach. One little Pellet for a laxative-three for a cathartic.--Adv.

After Many Years

During the Civil war a soldier cut his name, "Moats," in a 50-cent plece. For 30 years thereafter he. thought no more about it, when one day the postmaster of Scotch Grove, 4547 PARK AVE., NEW YORK CITY Iowa, where Monts conducted a blacksmith shop, showed him a 50cent piece with the word cut in it-"Moats."

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A CRY in the night may be the first warning that Baby has colic. No cause for alarm if Castoria is

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ration brings quick comfort, and

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Always keep a bottle in the house.

It is the safe and sensible thing when children are ailing. Whether

it's the stomach, or the little

bowels; colic or constipation; or

diarrhea. When tiny tongues are

coated, or the breath is bad. When

there's need of gentle regulation. Every child loves the taste of

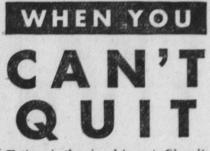
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The Gulf stream of the Atlantic



Fatigue is the signal to rest. Obey it if you can. When you can't, keep cool and carry-on in comfort.

Bayer Aspirin was meant for just such times, because it insures your comfort. Freedom from pains that nag at nerves and wear you down. One tablet will block a threatening headache while it's still just a threat. Take two or three tablets when you have caught a cold, and that's usually the end of it. Carry Bayer Aspirin when you

Carry Bayer Aspirin when you travel. Have some at home. It will often "save the day." From a grumbling tooth to those rheumatic pains, Bayer Aspirin is ready with its quick relief—and it always works. Neuralgia. Neuritis.

Any nagging, needless pain. Get the genuine tablets, stamped with the Bayer cross. Why experiment with imitations costing a few cents less? The saving is too little. There is too much at stake. But there is economy in the purchase of genuine Bayer Aspirin tablets in the large bottles



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Iowa, the Hawkeye state. Louisiana, the Pelican state, Michigan, the Wolverine state, Minnesota, the Gopher state. Oregon, the Beaver state. Wisconsin, the Badger state.

But it is a curlous fact that in ad-Jition to every state having a popular nickname, there are some states which have symbols that are in no way connected with the nickname. If they were connected, whenever you thought of Arkansas, you would think of a bear. But the fact is that whenever you think of that state, the chances are that there rises to your mind the image of one of those lean, lanky porkers with its long snout and high, sharp backbone which gives it the name of razorback. For the razorback, descendant of the pigs which the Spanish explorer, De Soto, brought to America and which escaped to the woods and ran wild for generations, is Arkansas' native hog and as such has become that state's symbol rather than the bear.

Time was when the razorback was such a familiar figure in the Arkansas landscape that it became a part of those "popular legends" which are responsible for fixing in the public mind certain ideas, as often erroneous as not, about the people in some one state or some section of the country. Hence the tradition of the "Ozark hill-billy" whose "shiftlessness" has been perpetuated in the famous "Arkansas Traveler" story. And a similar story in which the razorback figures is this one:

Traveler Through Arkansas (observing a razorback scratching itself against a post)-Your hogs seem to be troubled with the mange.

Ozark Hill-Billy -- Mange nuthin'. stranger. That there is a razorback and he's just stroppin' hisself!

So while it may be true that the razorback hog was once the most distinctive domestic animal in Arkansas, modern farming and modern live stock raising in Arkansas have largely done away with him and he is more of a relic and a tradition than a living fact. The tradition has been preserved, however, by the athletic teams of the University of Arkansas which have become widely known as the "Razorbacks," especially since an Arkansas football star made the All-American.

In fact, such has been the widespread interest in college athletics in recent years that the mascots and nicknames of athletic teams, especially those of the state universities. have done much to fix in the public mind a certain state, symbolism, even though it may not always agree with that suggested by the "official" state nickname. Outstanding examples of those which symbolize both the state and the college athlete are the "Wolverines" of the University of Michtgan, the "Gophers" of the University of Minnesota and the "Badgers" of the University of Wisconsin.

In that connection there has come

THE ARKANSAS RAZORBACK

that in all probability Michigan, the Wolverine state, does not now have a occasion!

single wild wolverine within its borders! That is the discovery that Fielding H. Yost, famous football coach and athletic director at the University of Michigan made, according to an article which appeared recently in the Detroit Free Press which says:

"When Professor Yost started out to ascertain why Michigan is known as the Wolverine state, he ran up against two printed explanations. It appears most likely that the name was given Michigan because bales of wolverine furs used to reach the New York fur market from the trading post at Sault Ste. Marie, although most of the furs were brought in from Canadian trappers and not from Michigan territory. "'In the early days of exploration.'

said Yost, 'a trading post was establisard at Sault Ste. Marie. Many, wolverine furs were shipped to the New York market from this post. A large proportion of these furs were supplied by Canadian trappers, although Michigan had wolverines at this time. As the result of these large shipments of wolverine furs, this territory came to be associated with wolverines and eventually the state came to be known as the Wolverine state.'

"This explanation does not coincide with the theory of A. D. P. Van Buren, in volume five of the Michigan Pioneer Historical Collections published in 1884. but Dr. Norman Wood of the university museum faculty, who co-operated with Yost in his search for living wolverines in the state of Michigan, declares that the second explanation is not at all plausible.

"Van Buren's explanation holds that the appellation, Wolverine state came about as the result of an incident which occurred at the old Ten Eyck tavern at Dearborn. A party from Detroit stopped there one day and were served wolf steaks, his story relates. One of the men facetiously remarked, 'We have eaten wolves; we must have the appetites of wolverines.' The story spread, Van Buren says, and the name came to be applied to the natives of Michigan.

"Game wardens, trappers, and fur dealers were called upon to aid Yost in his attempt to learn whether the wolverine is extinct in Michigan. With two exceptions, these men supported the findings expressed by Dr. A. C. Roche, of Calumet, who wrote: "I waited to look this matter up pretty thoroughly. I have seen practically all the game wardens and hunters in these parts and not one has ever seen a wolverine up here.""

Mr. Yost's inquiry was made during his quest for a native Michigan wolverine to be used as a mascot for the Michigan athletic teams, a quest which was unsuccessful, 'True, live wolverines have been displayed at some of the big football games at Ann Arbor in recent years but they had

to light recently the curious paradox (been captured in Alaska and borrowed from the Detroit zoo for the In contrast to the "Wolverines." the "Gophers," the "Badgers" and the

"Hawkeyes" which symbolize the state, its inhabitants and its university teams, there are states in which all three are vastly different. South Dakota is the Sunshine state but it has an animal symbol-the coyoteand South Dakotans and the athletes of its state university are known as "Coyotes." Louisiana is the Pelican state but its inhabitants are more widely known as "Creoles" than they are as "Pellcans." For the chances are that mention of the latter word. instead of painting a word picture of a state, will more likely result in there being quoted the famous lingle about:

A wonderful bird is the pelican Its neck holds more than its belican: It can hold in its beak enough food for a week

But I don't see how the helican.

The largest state in the Union is called the Lone Star state but it has a symbol which never fails to bring to mind instantly the name of Texas. "Kicked like a Texas steer" and "wild as 'a Texas longhorn" are similes which are a part of our everyday language, so the ideas of Texas and longhorn steer are inseparably linked. It is wholly appropriate that this animal should be the symbol of Texas for upon the vast cattle trade which began after the Civil war was Texas' present prosperity based.

If you don't say "kicked like a Texas steer" then you probably say "kicked like a Missouri mule" and every one knows of the dynamite that is concealed in the heels of that animal. Which brings up the fact that Missouri, the Show Me state, is blessed with not just one state symbol but two and either one of them as surely spells "Missouri" in the mind of the average American as longhorn steer spells "Texas." One of them is the mule and the other is the houn' dog. Not only is Missouri famous for the number of its houn' dogs, and their high value for hunting purposes, but there are two other reasons for the association of the words "Missouri" and houn' dog." One is the famous oration delivered by a famous Missourian-Senator Vest's "Eulogy on the Dog"-delivered during a lawsuit over the killing of "Old Drum." The other is the famous Houn' Dog song. "They Gotta Quit Kickin' My Dog Aroun'." which played an important part in the campaign for the nomination for President of another famous Missourian, Champ Clark,

Senator Vest's oration, which has become a classic in American literature, not only immortalized the Missouri houn' dog but has become a veritable monument to "man's best friend."

(6) by Western Newspaper Union.)

in the world. Other harmonic analyzers have been built and some are in use in other scientific institutions, but they cannot approach the Michelson-Stratton "thinking machine" in their ability to solve problems that task the human brain.

(@. 1931, Western Newspaper Union.)

Where Clemenceau Died While the question whether the apartment in the Rue Franklin, Paris, where Georges Clemenceau died is to have official status as a national museum remains unsettled, it is actually being maintained as an unofficial museum by "The Tiger's" faithful old valet, Albert. Hardly a day passes that a number of persons apply to Albert for permission to see the study where his master worked on his memoirs almost up to the moment of his death. Albert has jealously seen to it that everything is just as it was the day M. Clemenceau died. Even the desk calendar remains untouched, marking the date of November 24, 1929. The old-fashioned guill pen M. Clemenceau preferred reposes under the desk blotter. One of his reference books is open at the page he last consulted.

Stamping Out Disease

The public health service says that the system of control of domestic ports and of medical inspection at foreign ports was so good last year that no instance of the importation of a quarantinable disease occurred. A few cases of contagious diseases occurred upon shipboard, but were isolated at guarantine hospitals.



In Ring Language Madge-I just saw that French nobleman who's after Doris-he's a

knockout. Mame-You said it, and Doris is going to take the count.



