

### AN X-RAY OF EARTH'S ATMOSPHERE HAS BEEN COMPLETED THROUGH USE OF NON-MAGNETIC SHIP, CARNEGIE

SAN FRANCISCO, Mar. 16. — The Carnegie Institution of Washington has just completed what might be termed an x-ray of the earth's atmosphere, and has forwarded from here all data in regard to the experiment, which was made through the use of the non-magnetic ship Carnegie, which arrived here recently.

The x-ray was in the form of observations of compass and other magnetic variations on all of the earth's oceans, these variations being traced in the atmosphere by two specially designated instruments called a deflector and magnetometer. These tracings later will be shown on a chart, which might be likened to the x-ray plate; this chart will be made available to every navy and merchant marine on earth as a guide to navigation, as nearly exact as it is humanly possible to make such a guide.

So intensively and penetratingly did the instruments work, aided by the utter absence of magnetic attraction by anything else on the vessel, that certain degrees of longitude in the Indian ocean were found recently to be radically different from the best charts and projections available up to that time. In some instances these differences amounted to several minutes.

There is a constant play of these variations over the magnetic fields, and the cause of this play or change, although exhaustively theorized upon, never has been exactly explained, the Carnegie scientists said. These magnetic changes make the utilization of the non-magnetic ship and its instruments and the preparation of new charts constantly necessary. For instance a mariner using a magnetic chart prepared by the Institution ten years ago could not steer as accurately as if he consulted a chart prepared but a year ago.

The magnetic ship made an absolute myth out of the general belief that the compass always points directly north. It added convincing proof to the scientific theory that there are only two longitudinal lines, one of them extremely irregular, where such a thing occurs. When

ever a ship crosses one of these lines the compass will get the direct polar influence. Everything else it will point either east or north or west of north.

In the taking of these figurative x-rays and the compilation of its data sometimes interestingly geographical as well as magnetic, the Carnegie has traveled more than 20,000 miles since she was launched June 12, 1909. She is the only vessel created with having circumnavigated the globe in the southern regions. In this voyage, entirely within the confines of the Great Southern Ocean, which has come to be the scientific name for the Antarctic, she stopped but once, that being at the island of Georgia, a whaling station in the South Pacific.

On the present voyage, which began in October, 1919, she touched at French West Africa, Buenos Aires, the island of St. Helena where Napoleon was exiled, Capetown, Ceylon, Australia, New Zealand, Lapete, the Fanning Islands and San Francisco. She will go from here to Samoa and the Panama Canal and then home to Washington.

The Carnegie was compelled to use her auxiliary gas engine a number of times to take her out of equatorial calm belts and to help drive her through storm tossed seas when the sails were in danger of blowing away. This engine is the only magnetic influence on board, but it is so far away from the recording instruments that it has absolutely no effect on them.

The Carnegie carries a complement of 25 persons. Captain J. P. Ault of Washington has full charge of both the navigation of the vessel and the recording of the magnetic data. He is assisted by a second in command, Lieutenant H. E. Johnston of the British Navy who resides in Toronto. Andrew Thompson Toronto; Robert M. Mills, Washington; and H. R. Grammon, Lincoln, Neb., act as observers.

The Carnegie is not a government enterprise but is solely under the direction of the department of terrestrial magnetism of the Carnegie Institution.



A BESETTING SIN

"I AM sure in my own mind that Mr. Griggings is drinking," remarked the landlady in the tone of one who views with alarm. "A man doesn't have such a red nose unless he is consuming intoxicating liquors."



"I have cautioned you many times, Mrs. Jiggers, against jumping to conclusions, which is your besetting sin," said the star boarder. "Many reputations have been ruined by such remarks as yours. Any physician will tell you it is possible to have a crimson nose and still be a teetotaler. I am not on intimate terms with Mr. Griggings, although I call at his store now and then to purchase some of his cigars, which are made of castings. He sells the worst snokes in this town, and should be rebuked for that, but I'd never suspect him of being an inebriate."

"He might become one if it happened to rain on some night, and he had a barrel under the rainspout, but so long as firewater costs money there isn't much danger of Mr. Griggings going astray. He is the most passionately economical man I ever saw. His respect for a penny is abnormal. A week or two ago I bought a cigar at his remnant counter, and was short one cent when I paid for it. I told him I'd pay the cent the next time I dropped in, and I fully intended to, but I forgot to drop in for several days. During that period, Mrs. Jiggers, I met him on the street several times, and he bowed me for that cent, with tears in his eyes, at every encounter. A man of that character won't waste any money in riotous living. You may paste that in your Sunday bonnet, my dear Mrs. Jiggers, for your guidance when you are trying to size up the caliber of your friends and acquaintances."

"I met Mr. Octagon on the street today and he told me a moving tale illustrating the unwise of jumping to conclusions. The other evening when he stepped onto the front porch to see if the newspaper had come, he found a sample package of snuff, which had been left there by some immoral distributor."

"Mr. Octagon had never taken a pinch of snuff in his life, and he was curious to know what the effects were. Curiosity, I may remark incidentally, is another weakness responsible for much trouble and suffering, and I trust you will guard against it hereafter, Mrs. Jiggers. It leads elderly landladies to ransack the trunks of their boarders and read old letters which were not meant for alien eyes. The fact that you are blushing shows that you are not entirely calloused."

"Well, Mr. Octagon put the packet of snuff in his vest pocket and sat around the fire until his wife left the room on some errand, and then he tore open the paper and inhaled a few grains of the stuff. He says he thought he would squeeze the top of his head off, and dislocate his ears. He whooped and kerchooded until you could have heard him half a mile away, and then his wife came rushing in."

"Ebenezer Octagon," said she, "you go to bed this minute or you'll be down with pneumonia tomorrow. Don't stop to argue—I won't hear a word! Off with you!"

"Octagon couldn't get in a word, and didn't want to very much, being ashamed to have his wife know he was experimenting with snuff; so he trundled off to bed at seven o'clock in the evening, and his wife rubbed goose grease all over his neck and chest and piled 500 pounds of blankets on him, and made him drink three or four gallons of yarb tea that tasted like the morning after the Fourth of July, and he lay there sweating all night, the most miserable man in town, all because his wife possessed the feminine weakness for jumping to conclusions."

"So let us be on our guard against such mental infirmities, Mrs. Jiggers, and meanwhile I would suggest that you replenish the maple syrup pitcher. These pancakes are too dry and dusty to eat without a lubricant."

**Attitude of Benevolence.**  
He—Phrenologists locate benevolence exactly at the top of the head.  
She—Yes; as far from the pocket-book as possible.

**Water Power in France.**  
The utilization of water power in France has increased by more than 50 per cent since the commencement of the war, and by the end of 1921 the available water power will be double the amount installed at the outbreak of the war.

**His Job.**  
"This new nurse wants to know what is his special job. He is an expert!"  
"All right. Tell him he will come in handy to put the patients to sleep."

Fifteen thousand people read The Gazette every day. A small amount will carry a message to them for you. It's the cheapest and the best.

# 84 Per Cent of the Business Failures in 1920 Were Non- Advertisers

**Water Always Finds Its Level Eventually**

The laws of Nature are certain and inexorable, and the laws of successful business are just as exact. Reasonable capital, careful buying, restricted credit, good salesmanship—all these are absolutely essential.

But these things are not sufficient. They amount to less than nothing if people do not come into the store. The whole organization is a costly, useless plaything unless you can sell the goods on the shelves.

The more people who enter the store and buy, the cheaper the overhead per dollar of sales and the greater the profit. That is a rule of business. You can't get around it nor sidestep.

**WILL YOU BE INCLUDED IN THE HIGH PERCENTAGE OF FAILURES IN 1921?**

Not if your business methods are right—and include above a **11 JUDICIOUS ADVERTISING.**

## DOES A HEN STOP SCRATCHING WHEN WORMS ARE SCARCE?

### JAP WOMEN AWAKING TO THEIR REAL POSITION

TOKIO, Feb. 7.—(Correspondence of The Associated Press.)—"Japanese women are beginning to awake to their real position," declared Representative Ichimiyama in the Diet while favoring the bill to abolish the law which prevents women from attending political meetings or joining political associations. The measure which was supported by members of all parties in the House is regarded as an important step in the emancipation of Japanese women.

"Socialism and women's suffrage," continued Representative Ichimiyama, who belongs to the governmental Seiyukai party, "constitute the two great streams of the worldwide social movement. The women of Japan are coming into contact with the broad current of international thought. It is quite natural and right that the fair sex should, under these circumstances, aspire to share with men, political privileges."

"The women are now allowed to discuss and read journals and books dealing with political problems, and yet they are denied the right to attend political meetings. This is at once absurd and unwise, and if the government does not make way for the natural claim of the women the time may come when the authorities may find themselves forced to do so through the ever-growing pressure of the progressive times."

Representative Matsumoto, Independent, was another warm advocate of the proposed change. "In giving the 30,000,000 women of Japan," he said, "a chance of acquiring political knowledge the government will take a broad stride towards real, national development. Women should not only be admitted into public meetings of political significance, but should also be entitled to the right of organizing political bodies of their own if occasion requires. The self-awakening of the fair sex is a fact that cannot be gainsaid. Society has attained such a marked advancement that, without political knowledge and comprehension, no women can be competent wives and mothers in the future."

Not only should the objectionable regulation be abolished in the opinion of Representative Koyama of the Kenmeikai opposition party, but the law forbidding laborers to organize unions should be done away with. "The time has passed," emphasized the speaker, "when women and laborers can be pressed down with impunity."

A committee is now considering the women's bill.

### RUSSIANS OF NOBLE BLOOD ARE PORTERS AND MESSENGERS

(By The Associated Press.)  
CONSTANTINOPLE, Feb. 23.  
Russians of noble blood and high rank are fighting the wolf from the doorstep in the uniforms of porters and messengers in Constantinople, center of the crumpled Empire's refugees. Some are small shopkeepers and many who knew court life in Petrograd are waiters and waitresses.

Wrangel's remnant of an army is disintegrating and many commanders are drifting into the city where they pocket their pride and tackle the hardest problem of their life—the mere getting enough to eat.

Generals and admirals have sold their decorations at a little daily auction in the courtyard of the Mosque Aghadjama in Stamboul where women of court circles dispose of furs, jewels and their last bits of finery.

Admiral Diekert, decorated with the Grand Cross of the Legion of Honor, was glad to get a place as hall porter in the French hospital. Prince Goubtsov, once rich and powerful in the government of Orel, is selling sausages in a store in the Pera quarter.

General Minshlevsky, formerly commander of the Czarina's Lancers, is a parcel carrier. A son of former Premier Sturmer is a bootblack.

Four Russian generals are making their living by catching and selling fish. Dozens of aviators and officers are waiters.

One Russian officer is chauffeur for the American military attaché here. Others are dock laborers and stablemen.

Many titled Russian women are selling flowers and newspapers. Princess Galitsin, Princess Shabofskoi and dozens of others are waitresses. Countess Vera Tolstoy is teaching English.

Their former greatness does not seem to count when there are thousands in the same plight and they are starting life over again, earning their own living.

### HIGH SCHOOL TRACK, BASEBALL AND TENNIS MEETS AT CAROLINA

CHAPEL HILL, March 17. — High school championship contests in baseball, track and tennis will be continued this spring by the University of North Carolina, according to an announcement made here today by E. R. Rankin, secretary of the committee in charge. Copies of the regulations in the three sports are being mailed to every high school in North Carolina. They contain the main provisions of former years.

The track meet and the tennis tournament will be held in Chapel Hill during high school week, April 13-16, when the high school debaters also will be at the university. The track meet will be held on Emerson Field, April 15, the finals of the tennis tournament the same day.

Entries for the baseball championships are limited to public high schools, city and rural. Notice must be served on E. R. Rankin, secretary of the university committee in charge of the contests, by April 1 that a team desires to enter the contest. Conferences will then be held with managers in the eastern part of the state and in the western part to work out the sectional championships, and the eastern and western champions will meet on Emerson Field for the state honors. The local committee will pay one-half the railroad fare of the two final teams and will entertain them at Chapel Hill.

Regulations of former years concerning eligibility and amateur standing are continued. The baseball championship has been won by Sylvan high school in 1914 and 1915, by Clayton in 1916, by Cherryville in 1917, by Winston Salem in 1918, by Red Oak in 1919, and by Greensboro in 1920.

### WANT WESTERNER ON INTER-STATE COMMERCE COMMISSION

(By The Associated Press.)  
WASHINGTON, March 16.—A request that a westerner be appointed to the interstate commerce commission was presented to President Harding today by a delegation of republican senators and representatives from that section. Members of the delegation said no one candidate was endorsed and that any of several from that territory mentioned for appointment would be satisfactory.

### WHAT JUDGE YORK SAYS

Pikeville, Ky.—One of Pikeville, Kentucky's best lawyers, testifies in favor of White Eagle's Senna-Tone; he says that it is the best remedy that he has ever used: "I had a bad case of stomach trouble, and my kidneys were out of order, and I had no appetite. I purchased a bottle of Senna-Tone and I was better after I had used half of it. I felt different after I had taken the second dose. I certainly take great pleasure in recommending White Eagle's Senna-Tone to my neighbors and friends that are affected as I was." For sale by Kennedy Drug Co.

"I owe what success I have had to a good constitution."—Paderewski, pianist.