

NORTHERN EUROPE IS HEATED BY THE WARM WATERS OF A GREAT RIVER OF THE SEA

On a blizzard day in February 1, as Cape North, the northerly tip of Scandinavia. The presence of diatoms and microscopic life makes such identification possible. From Cape Florida to Cape North is 5200 miles.

Contrasted with this oceanic river, the great land streams become mere brooks. If all the rivers of the United States were combined they would make but a small beginning for the Gulf Stream. Five hundred Amazons would not equal its flow, Father Mississippi would need to be multiplied 3000 times or the lordly Hudson 10,000 times, to rival this blue river of the sea. But the Gulf Stream hides its might beneath the surface of the sea, and mariners sailed its waters for centuries before they realized its influence upon navigation and climate.

This great current in the Atlantic was named "the Gulf Stream" by Benjamin Franklin.

Northern Europe would be a frozen waste were it not for the warmth brought to its lands by the waters and winds of the Gulf Stream. The British Isles are on the same parallels of latitude as Labrador, but Labrador is washed by a current from out the Arctic, and in winter Labrador and the even more southerly Newfoundland are locked in ice, whereas no port of the British Isles is ever icebound.

England's "green and pleasant land" could not long remain so were it not for the constant temperature and the continual circulation of this hot-water heating system of the North Atlantic. It has been computed that if the Gulf Stream should lose 10 degrees of its average temperature, ice-age conditions would soon return to the British Isles and Northern Europe.

What produces and regulates this tremendous flow of water?

A nautical engineer of the hydrograph office of the Navy in Washington says:

"Don't think of the Gulf Stream as an isolated phenomenon. It is part of the circulation of waters which embraces the world. Cold water from the Arctic pours down past Greenland into the North Atlantic, as the warm waters of the Gulf pours northward. In the South Atlantic, the Brazil current flows down the coast of South America and gradually curves eastward toward the shores of Africa. Cold counter currents sweep up from the Antarctic to compensate for this interchange of warm waters.

"The same general system of circulation prevails in the Indian Ocean and in the Pacific. The principal stream in the North Pacific is the Japanese current, which originates in the warm equatorial waters surrounding the Philippines, courses northward past Japan in much the same way that the Gulf Stream skirts our coast, curves to the east, and washes the shores of Northern Alaska, Western Canada and Western United States. It is this warm stream that keeps Sitka, Alaska, ice-free. When opposite ports in Kamchatka are frozen solid. Vancouver, Seattle and San Francisco get much of their climate from the Japanese Current.

Summers Over Blue Waters

Shortly before sundown a faint haze appeared to the east, and as we drew near we saw that it lay like a halo over a blue sea. The dividing line between green and blue in the ocean was as sharply marked as the contrasting tints on a map, and I watched the ship push its way into the blue. The thermometer, again dropped over the side showed a temperature of 75 degrees—but no one needed the instrument to know that summer climate had suddenly supplanted winter in our neighborhood of the Atlantic. There was a different "feel" to the air. It was moist and balmy; gradually the warmth percolated all over the ship; overcoats were discarded. We awoke next morning in a smooth sunlit sea to watch clumsy porpoises frolicking in our foaming track and the delicate silvery flying fish that skimmed the indigo waters.

"No current is more powerful than the Gulf Stream," explained the informative officer. "We are crossing it now to get out of its drag, which would set us back seventy or eighty miles a day. Coming north we keep in the axis of the stream to have the aid of its strong upward current."

We crossed the Gulf Stream opposite North Carolina.

It is the vastest known flow of water on the earth. A Government hydrographer who spent two years studying the Gulf Stream at its starting place in the straits between Cuba and the Florida keys, found that the volume of water pouring through is 90,000 million tons an hour.

From the straits of Florida it flows due north, soon swerves to the northeast, joins the general North Atlantic drift, and touches Europe. Tropical berries, beans from Jamaica, seaweed from the Caribbean Sea, and fragments of driftwood from Mexico and Central America have frequently been picked up on the shores of Northern Europe. Indeed it has been said that these signs of land hastened the explorations of the early navigators.

Warm Waters Flow 5,200 Miles

The warm salt waters of the Gulf Stream have been identified as far up

rection as the hands of the clock, whereas those in the Southern Hemisphere move anti-clockwise. This is as they should move if influenced by the rotation of the earth.

"We believe that differences in temperature, differences in salinity, differences in atmosphere pressure, and the rotation of the earth all have an effect upon ocean currents, but the principal cause is the wind. This idea is by no means modern. Benjamin Franklin adopted it as his explanation."

Source of Gulf Stream

The Gulf of Mexico is fenced in by Florida and Yucatan, with the space between these two arms partly blocked by the island of Cuba. As the waters enter the Gulf by the Yucatan Channel south of Cuba only one way of escape is left—the Florida Straits, north of Cuba. Some of these wind-driven waters swirl around the Gulf in a circular movement, some cut across it diagonally, others flow recently around the west tip of Cuba but all eventually reach the Florida Straits with a strong head back of them and the resulting flow into the Atlantic is the Gulf Stream.

The Florida Straits—where the Gulf Stream may be said to be molded—are ninety miles wide and about 350 fathoms (2100 feet) deep. After the turn around the keys has been made, about opposite Miami, the depth suddenly increases to approximately 550 fathoms (3300 feet) and the Gulf Stream falls over this natural dam into the ocean.

Thus the Gulf Stream is not only a mighty river but also one of the greatest waterfalls, with a drop of over 1000 feet; Niagara Falls has as its greatest drop 167 feet.

After leaving Hatteras the Gulf Stream parts company with the 100 fathom line for its set now is across the ocean. Opposite Norfolk the stream is about eighty-five miles off shore; opposite Atlantic City, about 12 miles; opposite New York, 200 miles or more. At this stage it is being forced steadily to the eastward by the prevailing winds and the rotation of the earth. It keeps its identity as a consistent drift until about in the neighborhood of the Azores, where it divides into three forks.

One of these branches flows northward in the direction of the Arctic. The middle one flows toward Europe. The third fork bends southward around the Azores, washes the Madeira and Canary Islands, is swept by the northeast trade winds toward the equator, joins the equatorial current setting westward toward South America and so enters the Caribbean, the Gulf of Mexico and finally becomes part of the Gulf Stream again. It has been computed that the time required to make this circuit around the Atlantic and through the Gulf is about three years.

CITY'S NEWS IS PUT INTO RHYME AND SAVES TIME

Moline, Ill., Jan. 22—Here's a news summary poetry that makes the front page every day.

It's the creation of Greenville Pridham, telegraph editor of the Moline Dispatch, who types out a rhymed review of the day's news after the last piece of copy has gone to the composing room.

"More than Weather" is the caption of the feature. Pridham signs it "The General." A sample:

Question Mark plane in air seventh day;

Tex Rickard, sports promoter, has passed away.

Congress is busy on tariff and pact; Cabinet guessers anxious for Hoover to act.

Coolidge will hear the next President tell

The Latin-Americans like us quite well.

A parrot sends a man to cold prison cell—

Did you ever hear one of these birds say—"well"?

Moline industry sold and C. L. Blanding is at rest.

We have recently lost one our city's best.

Man nearly frozen as our thermometer goes down.

The prediction is warmer for the old home town.

APPOINTMENT OF H. J. LOGAN TO THE SENATE

Amherst, Jan. 23—Regardless of the political opinion of the citizens of Amherst, all were delighted today when the announcement was received from Ottawa that Hance J. Logan, K. C., had been appointed to the Senate. Mr. Logan at the present time is a director of the C. N. R. and only recently returned from the West Indies where he has been seeking to further Canadian trade relations. He will arrive in Amherst Thursday evening on the Ocean Limited, and it is understood that he will receive a particularly warm greeting from his many friends.

Mr. Logan since 1895 has taken a prominent part in the political affairs of Cumberland county, and at the same time has identified himself with many progressive and civic movements in the town and county. It was only a few months ago that he fathered the initial movement dealing with the Chignecto Canal. He urged the need of trade development between Canada and the West Indies after an initial visit some years back to these lands, and the recommendations which he subsequently made, when appointed as an official trade ambassador have been closely followed in the recent trade activities.

It was realized in Cumberland that his appointment to the directorate of the Canadian National Railways some months ago was only a slight token of recognition for his services, not only in Cumberland, but in the province and the Dominions. His appointment to the Red Chamber has been hailed with acclaim in Amherst.

Athens, Jan. 25—The Rotary Club idea has spread to Greece. A club has been organized in Athens, with Spyros Loverdos, banker, as president. Greece is the forty-fifth country to join the movement.

Budapest, Jan. 25—Count Stephen Bethlen, Premier of Hungary, has ordered that all foreign books and periodicals of a subversive or revolutionary character, shall be banned from Hungary.

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A HAVEN FOR A FAMOUS OLD WINDJAMMER

London, an. 23—The last of Britain's famous old windjammers, the four masted bark Garthpool, will anchor in the Thames and pass the rest of her days in quiet, peaceful waters if efforts are successful to save the old sailing vessel from shipbreakers.

Sole survivor of the nineteenth century square rigs on British registry, the Garthpool is a gallant example of the sturdy ships which carried the sea borne trade of the British Empire at a time when Britain and the United States competed under sail as they now do with steamships.

Anchored near Blackfriars Bridge in the heart of London the Garthpool would be either a museum or a training

ship for mercantile marine cadets. In preserving the vessel Britain would be following the example of a public spirited citizens of America who enshrined the famous old whaleship Charles W. Morgan near New Bedford, Mass. as a memorial to the industry which made New England famous. The Honorable Company of Master Mariners in London wants to acquire the Garthpool for training purposes, but lacks funds.

Meanwhile the old windjammer still sound but a little slow in these speedy days of ocean craft, bravely plows outward bound in ballast for Australia. She was originally designed for the Calcutta-Dundee jute trade, but now hails from Montreal.

One time when man wishes there was one more electric button to push is when he is asked to mash potatoes for his wife, adhering to old primitive methods.

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