

Zeppelin Flew 4,130 Miles Round Trip from Bulgaria to Khartoum

A RECENT wireless dispatch from a Berlin correspondent contains some most interesting news concerning Teutonic developments in giant aircraft. It is said that the Germans are busy constructing a mammoth airplane intended to cross the Atlantic Ocean. This huge aerial craft, now under construction, is stated to have a wing spread of 198 feet, and it is to be engine by 3,000 horse-power in petrol motors.

The Teuton aerial flight experts are said to be busy constructing a gigantic Zeppelin craft at Friedrichshafen, which is to be propelled by nine engines and eight propellers. It will have a carrying capacity of one hundred passengers, and it is hoped that the international situation will clear up so that the first trans-oceanic flight may take place this coming July. The voyage across the Atlantic from a point in Germany to New York City is expected to take about forty hours.

But coming down to cold facts and past performances, the accompanying illustration shows one of the most remarkable aerial trips accomplished during the great war, in which a giant Zeppelin flew from Jamboli, in Bulgaria, to a point over Khartoum, on the river Nile in Africa, a distance as the crow flies of 2,065 miles, and a distance of 4,130 miles for the non-stop return trip. The Zeppelin carried a crew of twenty-two men besides twenty-five tons of ammunition and medicines for the Teuton army in German East Africa. The great craft glided from its hangar at Jamboli at eight o'clock on the morning of November 21st, 1917. On the night of November 22nd-23rd, the monster airship had arrived over Khartoum, when it picked up a wireless message from the German radio station at Nauen, ordering it to return at once, as the Government at Berlin had ascertained in the meantime that the majority of Gen. von Lettow-Worbeck's troops had surrendered to the Allies.

Consequently the air-ship turned about in mid-air without making a landing and arrived at Jamboli at eight o'clock in the morning on November 25th. The technical director of the factory where this aerial craft was built has stated that a ship of

this type was easily capable of flying from Berlin to New York and returning without a stop. The air-line distance from Berlin to New York City is approximately 3,930 miles, and the round trip distance would be 7,860 miles, or nearly eight thousand miles.

Talking of dirigible gas-bag types of aircraft, the U. S. Navy Department has just announced a remarkable new gas, which is available by a new process. Discovery of this new inert, non-inflammable gas for balloons, dirigibles and other lighter-than-air

owned by the Lone Star Gas Company, the statement said, and a ten-inch pipe line to cost \$1,050,000 is being laid for a distance of ninety-four miles from the wells to a plant at North Fort Worth, where the gas will be compressed into cylinders for shipment to the balloon fields.

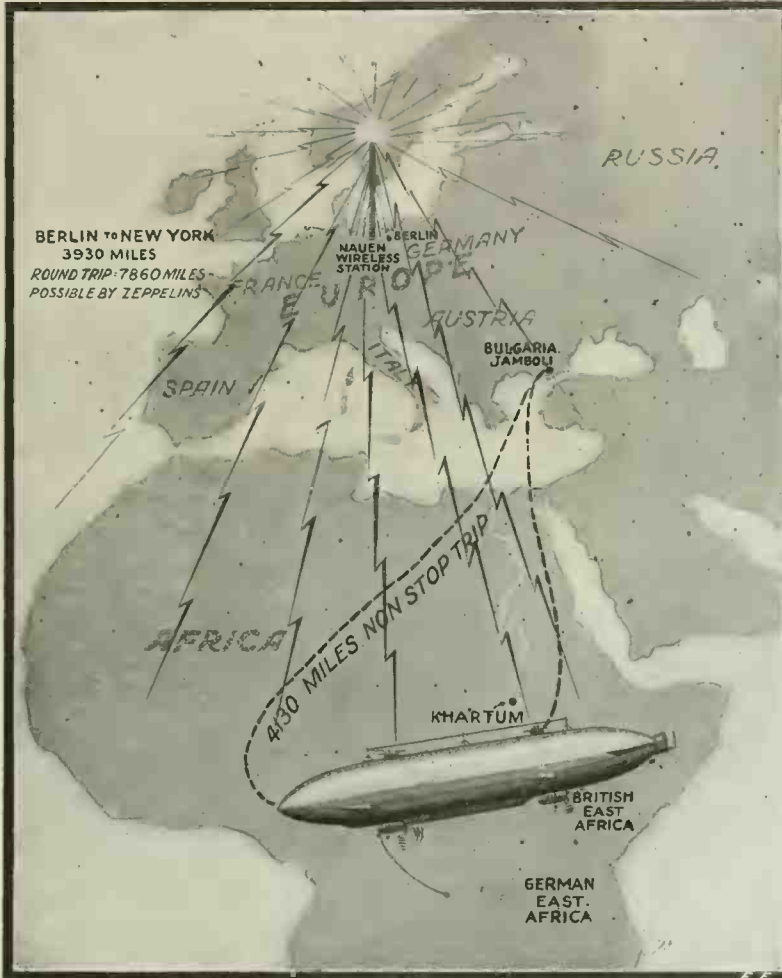
High proof gasoline is obtained in a ratio of about five gallons per 1,000 cubic feet of gas, it was said, and after the 1 per cent of "argon" is removed, by agreement with the oil company, the remainder of the gas

is turned into the city mains of Fort Worth and Dallas.

The Department estimates that the plant at North Fort Worth, designed by the Navy Bureau of Yards and Docks, and which will cost \$900,000 will be completed by April 1.

INJURING THE EYES BY PHOTOGRAPHY.

When one sees so many veteran photographic workers, in both amateur and professional ranks, suffering from astigmatism, one wonders what is the actual cause of this distressing optical defect. On inquiry, it will be found that in many cases the eyes were strained during the early days of dryplate photography, when the plates—then coated with a very slow emulsion—were handled, and examined during development, by the light of a deep ruby oil-lamp. Amateurs at first used advisedly a small pocket-lamp, and undoubtedly incurred serious injury to the sight. Later—thank goodness—light of greater volume was employed, ruby light being also superseded by orange light; preferably fabric instead of glass being used to expose the dryplates sparingly to the rays of this brighter light. Now the photographer confronts the danger of ruining his eyes from exposure to the electric arc when used for printing-purposes. To look at the bare arc is obviously injurious to the sight. Arc-rays reflected from the surface of the negatives are also bad for the eyes. A good plan is to use a printing-lamp in which only reflected light reaches the negatives, or to use a printing-cabinet in which the arc is enclosed, care being taken to cover up empty spaces with pieces of cardboard so that the arc or its reflections do not reach the printer's eyes.



Copyright, 1919, by E. P. Co.

One of the Great Scientific Feats of the World-War Was the Non-Stop Flight of a German Zeppelin Over the Route Here Illustrated—a Distance of 4,130 Miles. Such a Craft Could Fly Easily From Europe to New York, and the Engineers That Built the Airship Claim That It Is Capable of Flying From Berlin to New York and Return, Without Stopping.

craft was revealed by the Navy Department on December 9th in a statement explaining expenditures for its production now being made jointly with the army.

The department states that the use of this new element, officially termed "argon," will eliminate the hazard of fire and explosion that always has accompanied balloon operations where "hydrogen" has been used to inflate the gas bags.

The gas from which "argon" is obtained comes from the wells at Petrolia, Tex.,