

When We Go to Europe by Airship

Why the 'Ships' That Failed in War May Win in Peace.

Why Dirigibles May Be Important for the United States.

How They Are Made and Run.

BY F. A. COLLINS.

WILL long distance air journeys be made by aeroplane or airship? The next few months will witness many contests between these two great rivals. Before the war regular air passenger services were maintained on regular schedule by dirigible balloons when the aeroplane was still an expensive and highly dangerous toy. After a year or so of fighting the position of the rivals was suddenly reversed—largely on account of war conditions—the dirigible was generally discredited, and the aeroplane was everywhere in evidence. Today the airship seems to be coming into its own, and promises to be the best form of aircraft to maintain regular passenger air service for great distances.

The public is quickly taking sides in the controversy, as aircraft takes its place in the world's commerce. It is only a few months since much derisive talk was heard of the "gas bags" whose day was confidently predicted to be at an end. The objection to the dirigible was that it was slow as compared with the speed of lighter than air craft. The Zeppelin raids upon London and Paris were discontinued because the enemy aeroplanes could literally fly in circles about the balloons. A fleet of aeroplanes could readily overtake a dirigible, since their speed was at least twice as great. The dirigible again formed a conspicuous target. It was as easy to hit as the proverbial barn door, whether fired at from the ground or aloft.

Increased Favor for the "Ship."
The sudden change of opinion in favor of the dirigible in the past few months, or even weeks, is one of the most remarkable reversals of opinion in aeronautical history. We are now learning for the first time that the builders of dirigibles, instead of becoming discouraged, were pushing construction without interruption. Both in England and Germany the advance in airship design and construction was one of the features of the war. With the signing of the armistice such information was published for the first time. The size of these giant aircraft, their photographs and the records they have established for speed and distance, have come as a complete surprise.

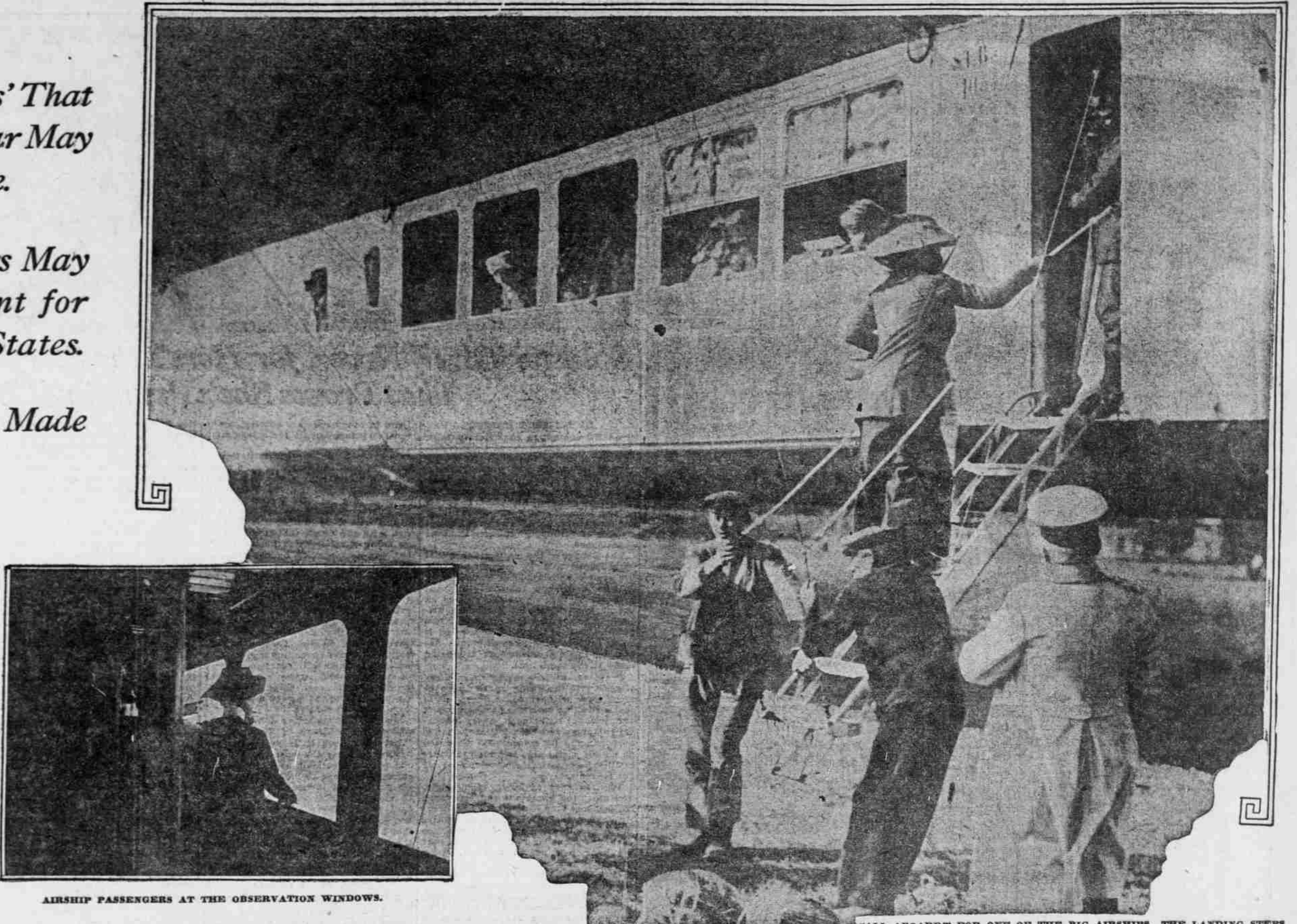
How many readers of this page know for instance that during the war the dirigible balloons of the embattled nations flew 1,500,000 miles? The speed of these great aircraft is at present nearly 10 miles an hour. Such craft have a flying radius of over 10,000 miles, remaining aloft for eight days, or, in other words, they could fly three times the width of the Atlantic ocean or the North American continent without coming down for fuel or provisions. They have risen to a height of about five miles. Airships have been built in England and in Germany 650 feet in length, and the 300-foot airship is on the way. There are no mechanical difficulties in building the 1000-foot dirigible. As a proof that the dirigible has arrived we find the British admiralty announcing that it purposes sending one of its giant airships across the Atlantic to the United States in the near future. A non-stop flight will be made as a training for the crew. On reaching America the aircraft will land a passenger by rope ladder, and then return overseas to Europe without landing or taking on fuel or provisions of any kind. In a few months at most, perhaps a few weeks, British aircraft will doubtless be seen above New York.

An air port has been established at Atlantic City in anticipation of the visit. There is no aerodrome in America large enough to house this visitor from overseas. Such a structure must be about 1000 feet in length, about half as wide, and with a height of several hundred feet. The doors of such aerodromes are so large and ponderous that they must be opened and closed by electrical mechanism. Until America has an aerodrome of such proportions it will make shift to entertain its visitor by using an ingenious tethering device, already employed successfully in Europe. A great steel pole or tower supports a cable, which is fastened to the dirigible. The cable is then run up the tower and over a pulley at the top. The dirigible is then lowered to the ground by means of heavy steel ropes or chains. The airship can be made to float at the same height and naturally points into the wind, just as a ship at anchor is swung by the tide. As the air currents shift their direction the dirigible swings slowly about. Since it may swing at any angle a field is required for 1000-foot ships at least 2000 feet in diameter or about half a mile across.

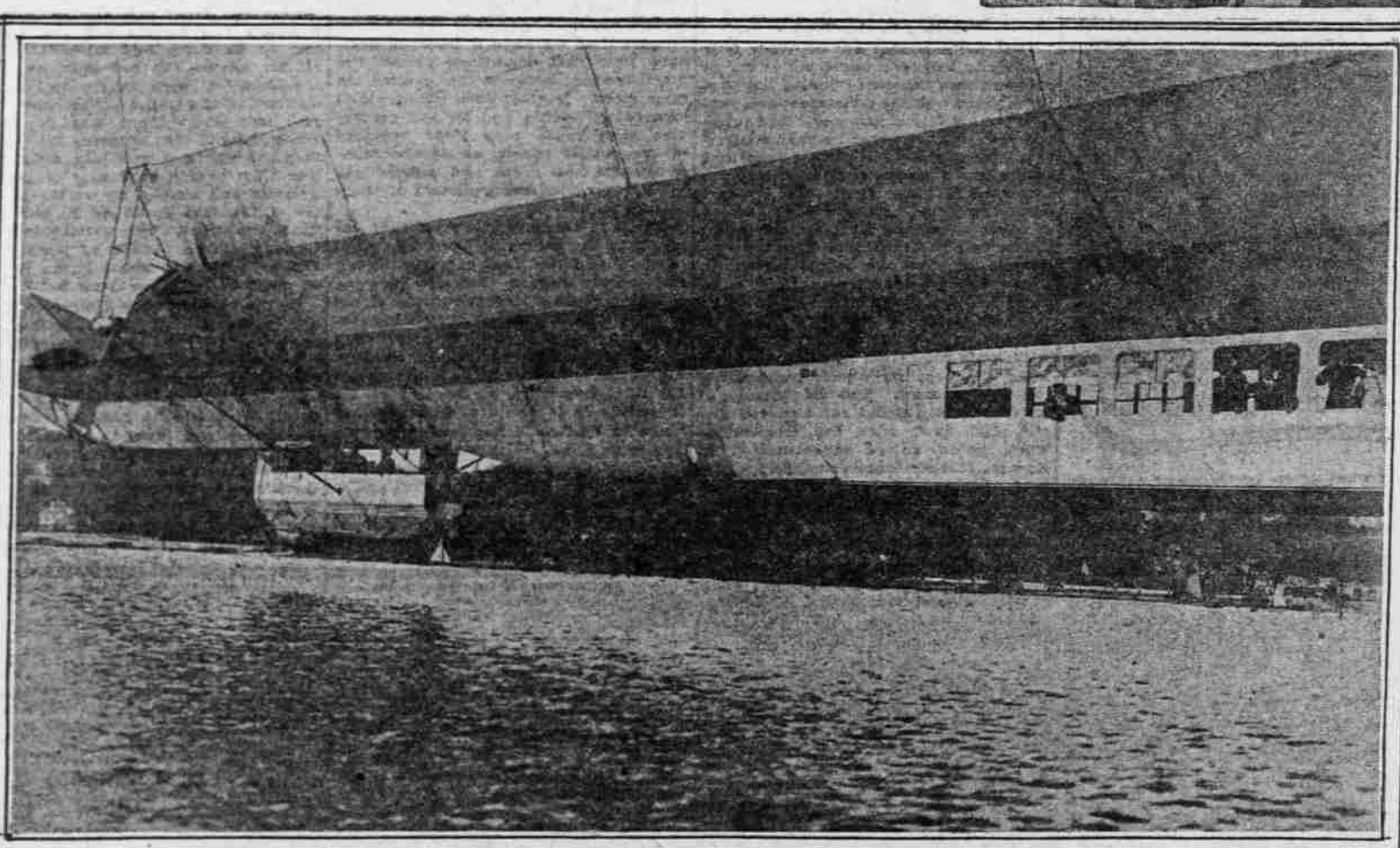
The dirigible is generally considered at best a slow craft, which is at the mercy of the lightest winds. The powerful engines now installed on such craft, however, drive them at high speed against ordinary air currents. It is generally believed among experts that a dirigible could cross the Atlantic, facing the average winds, making the journey in less than 50 hours. If the wind currents were strong and favorable as to direction, the crossing will be made in less than 40 hours. Even when driving against a strong head wind the speed of the airship is about three times that of the average Atlantic liner.

The United States should profit more by the introduction of air travel than any other country in the world. It is a matter of magnificent distances where the saving of time, especially for long journeys, means money. For years immense sums have been expended over the sailing ships and mail boats, which cut a few hours or even minutes from the time of crossing. A two-day air service between New York and London or Paris, which the airship will make possible, will work a revolution in travel comparable to that which came with the introduction of the steamboat over the sailing craft. The friends of the dirigible believe that, whereas a regular passenger service by air is now possible by airship, years will be required to develop the aeroplane to a point where a regular service can be maintained across the Atlantic.

So confident are the friends of the dirigible of the possibilities of trans-Atlantic service that it has been figured out in detail the exact cabin rate of these airships for the crossing. A line of airships, it is believed, could be run at a profit by charging \$55 per passenger. In view of the present ocean rates these figures will appear very reasonable. The passage will be made in two days, and the danger of making such a trip is doubtless greatly exaggerated. We think of the dirigible as being dangerous merely because we have in mind its war records. It must be remembered, however, that these disasters were caused by hostile aircraft or land bat-



AIRSHIP PASSENGERS AT THE OBSERVATION WINDOWS.



THE AIRSHIP "HANSA" LANDING ON THE ELBE NEAR FALKENTHAL.

teries firing upon them. In peace times this danger is happily at an end.

Before the war passenger travel in the Zeppelins was quite as safe as ocean travel. One of the airships, for instance, made 224 trips carrying 228 passengers and remaining aloft more than 10,000 hours without the slightest accident. Even in these days air travel was luxurious. The cabins, lined with hard woods inlaid with ivory, allowed the passenger to move about with ease. Rows of upholstered chairs were set before broad windows from which marvelous views might be enjoyed. Meals were served during the air voyages.

In the early airships there was some danger of fire. For this reason the meals were served cold and smoking was prohibited. Today the use of helium changes all this and the air liners of the future may serve hot dishes and even introduce the smoking cabin. Every luxury of modern travel may be enjoyed aboard the airship. And the passenger dirigible assures a degree of comfort possible in no other vehicle devised by man. The car is absolutely free from vibration and the passenger seems to float through space with only a gentle swinging motion. The passenger aboard an aeroplane on the other hand is deafened by the roar of the propellers, constantly shaken by the violent vibration of the craft and must be securely belted into his seat against the rolling and pitching of the machine. The lighter than air machines must always assume a greater element of safety than the heavier than air machine. If anything goes wrong with the aeroplane it must immediately descend. The airship being lighter than air can remain aloft indefinitely, even if its motors should stop. The great modern dirigibles are equipped with six engines, developing upwards of 4000 horsepower. The airship will drive ahead if only one of its engines be working, and even if all should fail she can float for hours or days until assistance arrives. At the worst she can descend slowly to the water when her gondola cabins will float upon the surface. The modern wireless electricity or telephone makes it possible for her to summon assistance from the entire width of the Atlantic.

from overseas. Such a structure must be about 1000 feet in length, about half as wide, and with a height of several hundred feet. The doors of such aerodromes are so large and ponderous that they must be opened and closed by elec-

trical mechanism. Until America has an aerodrome of such proportions it will make shift to entertain its visitor by using an ingenious tethering device, already employed successfully in Europe. A great steel pole or tower supports a cable, which is fastened to the dirigible. The cable is then run up the tower and over a pulley at the top. The dirigible is then lowered to the ground by means of heavy steel ropes or chains. The airship can be made to float at the same height and naturally points into the wind, just as a ship at anchor is swung by the tide. As the air currents shift their direction the dirigible swings slowly about. Since it may swing at any angle a field is required for 1000-foot ships at least 2000 feet in diameter or about half a mile across.

The dirigible is generally considered at best a slow craft, which is at the mercy of the lightest winds. The powerful engines now installed on such craft, however, drive them at high speed against ordinary air currents. It is generally believed among experts that a dirigible could cross the Atlantic, facing the average winds, making the journey in less than 50 hours. If the wind currents were strong and favorable as to direction, the crossing will be made in less than 40 hours. Even when driving against a strong head wind the speed of the airship is about three times that of the average Atlantic liner.

The United States should profit more by the introduction of air travel than any other country in the world. It is a matter of magnificent distances where the saving of time, especially for long journeys, means money. For years immense sums have been expended over the sailing ships and mail boats, which cut a few hours or even minutes from the time of crossing. A two-day air service between New York and London or Paris, which the airship will make possible, will work a revolution in travel comparable to that which came with the introduction of the steamboat over the sailing craft. The friends of the dirigible believe that, whereas a regular passenger service by air is now possible by airship, years will be required to develop the aeroplane to a point where a regular service can be maintained across the Atlantic.

So confident are the friends of the dirigible of the possibilities of trans-Atlantic service that it has been figured out in detail the exact cabin rate of these airships for the crossing. A line of airships, it is believed, could be run at a profit by charging \$55 per passenger. In view of the present ocean rates these figures will appear very reasonable. The passage will be made in two days, and the danger of making such a trip is doubtless greatly exaggerated. We think of the dirigible as being dangerous merely because we have in mind its war records. It must be remembered, however, that these disasters were caused by hostile aircraft or land bat-

FATE FELS ARIZONA FARMER WHO FIGHTS LAND LEASE BILL

Victory Seems Near, When Automobile Accident Shatters Hopes and Almost Ends Life.

PHOENIX, Ariz., June 23.—E. O'Brien Mann, farmer, of Cochise county, Arizona, has just lost one of the bitterest legislative battles ever waged in the state. At the final moment of his defeat he almost forfeited his life as well.

The land leasing bill, passed by the last legislature, permitting the leasing of land from the state without limit and raising the lease term from 5 to 20 years, was the object of Mann's antagonism. He said the enacting of such a law meant wiping out of small cattlemen, and single-handed, without funds, he launched his lobby against the measure when it was called up in the legislature.

The little farmer from Cochise, fairly well along in years, slightly stooped, but keen-eyed and alert, succeeded in raising such a storm of opposition to the bill that it barely escaped defeat; but finally it passed.

Then it went to Governor Campbell for signature or veto. Mann marshaled his forces and the governor's office was deluged with telegrams urging him to kill the measure, but a flood of messages of equal size poured in from the bill's friends. The governor sent the bill to the secretary of state without executive action. The people took this to mean that it would become law automatically, until the attorney-general stepped in with an opinion that, since the measure carried an emergency clause, it was not law at that time without the governor's signature.

Referendum Petition Started.
This problem went to the court for decision, where it still hangs, but Mann began to prepare for the eventuality of a judgment supporting the bill. His only remaining weapon was a referendum petition. He had nobody to help him circulate the petition and he was without funds.

The Cochise farmer looked about for a job and found one, washing dishes and waiting on table in a Phoenix restaurant, and in his spare hours, night and day, he circulated his petition praying that the land leasing bill be submitted to the people.

Saturday midnight marked the close of the period in which referendum petitions could be filed, and 11:38 P. M. found E. O'Brien Mann on his way to the secretary of state's office at the capitol with his petition and its thousands of signatures under his arm.

As he stepped off a curb at a downtown corner a high-powered automobile struck him. When he regained consciousness, he says, there was nobody in sight and the automobile had gone, despite the fact that it is a felony in Arizona to hit a pedestrian with an auto and leave him in the road.

Fond Hopes Shattered.
Worst of all, his referendum petition with its signatures was scattered all over the pavement for half a block. Both Mann's feet were injured and his shoulder badly bruised, but he pulled himself together, gathered up as much of his petition as he could find and made for the nearest taxicab stand. He crawled into the machine, told the driver to make top speed to the capitol, and added the injunction that, if his passenger fainted, the bundle under his arm was to be rushed into the secretary of state's office.

A few moments before midnight the foe of the land leasing bill staggered into the capitol, filed his petition and then went to a doctor, under whose care he has been ever since.

The Cochise farmer's disappointment came next morning when he was informed that his petition was short 450 names of being sufficient.

Mann says he recognized the four men in the automobile that struck him, but he refuses to make known their names.

"What's the use," he remarked philosophically, as he nursed his two crushed feet and bruised shoulder, "I'm beaten and, anyway, it would be my word against four."

ROMANTIC FIGURE OF ARIZONA'S PIONEER DAYS PASSES AWAY

Perry Owens, Some Shot, Dashing Indian Fighter and Fearless Sheriff, Is Dead.

SELIGMAN, Ariz., June 23.—A romantic figure of Arizona's pioneer days has just passed in the person of Commodore Perry Owens, cattleman, sure shot, dashing Indian fighter and fearless sheriff, who died here.

With his long, waving hair falling over his shoulders, his pleasing personality and dignified carriage, Commodore Owens carved a spectacular career on Arizona's tablets of history between his arrival in the state in 1852 and his death.

Owens was born in Indiana 65 years ago and came to Arizona via Texas and New Mexico, in 1852, to become range foreman of a cattle company at Navajo Springs.

In a single-handed battle with three Navajo Indians who were stealing the company's cattle, Owens killed the trio. Then followed numerous clashes with

ROMANTIC FIGURE OF ARIZONA'S PIONEER DAYS PASSES AWAY

Perry Owens, Some Shot, Dashing Indian Fighter and Fearless Sheriff, Is Dead.

the red raiders, many of whom fell before his deadly rifle. In time the Indians came to believe he bore a charmed life and gave him a wide berth, since, despite his frequent battles with them, he did not receive a single wound.

In 1888, when outlaws throughout Apache county were defying the law, Owens was elected sheriff, and, backed by Judge Robert E. Morrison, now of Prescott, he obtained indictments against 16 of the most notorious thieves and murderers.

While the grand jury were reporting the true bills, a dozen of the outlaws fled the country rather than face the new sheriff. The latter tracked three of the remainder to the Blue river and there, when they were resisting arrest, they fell before the guns of Sheriff Owens and his posse. A fourth member of the gang, Finn Clanton, was trapped, captured and sentenced to serve ten years in prison.

Perhaps Owens' most spectacular battle was one fought at Holbrook, where the sheriff killed Andy Cooper, a notorious bad man, and two companions. Owens had been told that the trio had taken refuge in a house near the railroad tracks. He rode down the street to the building, walked up to the door, and rapped for admission, with his rifle held in his right hand at his hip. Cooper opened the door and attempted to draw his revolver, but the sheriff fired from the hip; Cooper fell badly wounded. At the same moment another shot rang out from behind from the gun of one of Cooper's companions, the bullet barely missing the sheriff's head. With his back to the second assailant, Owens threw his rifle over his shoulder and fired. The outlaw dropped mortally hurt.

As the officer retreated a few steps he saw a man through the window maneuvering for a shot and again the sheriff's rifle spoke. The outlaw inside fell to the floor and died within a few minutes. It was Cooper, who had been shot first when he opened the door.

Then the third desperado made his appearance, running around the corner of the house with his revolver raised to fire, but before he could pull the trigger Owens shot and the last of the gang died in his tracks.

Lace-edged straw is a fashion again there never was anything prettier.