



1—President Hoover congratulating Dr. Hugo Eckener on the world-circling flight of the Graf Zeppelin. 2—C. I. Charles Lindbergh being made an honorary member of the "High Hat" squadron of navy flyers at the Cleveland air meet. 3—The Junior rifle school at Camp Perry, Ohio, where boys and girls were instructed in marksmanship.

NEWS REVIEW OF CURRENT EVENTS

Anglo-American Agreement on Naval Limitation Getting Nearer.

By EDWARD W. PICKARD

RAMSAY MACDONALD, prime minister of Great Britain, told the assembly of the League of Nations in Geneva that he and Ambassador Dawes in their many conversations concerning naval armament limitation had reached an accord on seventeen of the twenty points under consideration, and that he hoped to be able very soon to announce a full settlement. But dispatches from Washington and Geneva indicated that the three points unsettled were vitally important and that on these Great Britain and the United States were still far apart. They involve cruiser tonnage and the comparative fighting values of vessels armed with 6-inch and 8-inch guns. General Dawes sent a long communication to the State department and it was considered at a White House breakfast attended by Secretary of State Stimson, Secretary of the Navy Adams and the members of the navy general board. Cruiser tonnage figures were not made public, but it was learned that the British cruiser requirements, though less than in 1927, were still far above the tonnage figures favored by President Hoover and would not give parity for the United States even if all our fifteen cruisers are built. The British insist they must have a large number of small cruisers, outside of the parity figures, to protect the world's sea lanes and protect British shipping.

Both Mr. MacDonald in Geneva and American officials in Washington were hopeful that the points of difference could be adjusted, and the prime minister said that as soon as this was accomplished he would formally announce his intention of visiting the United States to confer with President Hoover and Secretary Stimson.

Aristide Briand, premier of France, invited the chief delegates of the European nations in the league to a meeting for the purpose of hearing his plans for a political, economic and social federation of European powers. He wished the delegates to submit the scheme to their governments and ask for their suggestions. Briand made it clear that the proposed federation is not aimed against the interests of the United States of America. Both Ramsay MacDonald and Dr. Gustav Stresemann seemed to like Briand's plan.

THAT the League of Nations would adopt the Kellogg pact outlawing war as its policy was a probability, made strong by the fact that such a course was said to be favored by Great Britain, France, Belgium, Germany and Japan. In his opening speech before the assembly Premier Briand declared the pact was really framed in the ideals of the league; and, following him, Foreign Minister Hymans of Belgium advocated a closer linking of the pact with the covenant of the league. He held the former was infinitely stronger than the covenant because it interdicted all wars of aggression while the covenant of the league left the door open for war when the council was unable to reach unanimity as to the identity of the aggressor. "The covenant is already old," he said. "The Kellogg-Briand pact embodies progress."

ADHERENCE of the United States to the World Court for International Justice came a big step nearer when delegates of forty countries belonging to that tribunal unanimously accepted the Root protocol, which was later approved by the assembly of the League of Nations. The United States government was officially notified of this action.

FOREIGN MINISTER STRESEMANN of Germany and his fellow delegates to the reparations conference at The Hague reported the re-

sults to the German cabinet and received the unanimous approval of the other ministers. The cabinet agreed to take all necessary measures to make the German people realize that The Hague agreement really represents a step forward, and not a defeat as the German nationalists are trying to label it.

In his address before the league assembly Premier Briand of France declared that at the reparations conference he would have been untrue to peace and concord if he had allowed "several millions of money" to prevent France from helping to liquidate the problems of the great war. Had he held back on concessions he would not have been entitled to be welcomed back to France. The nations must be ready to make concessions.

Orders for evacuation of the Rhineland by the British and Belgian forces have been issued, and the French are preparing to get out as soon as they can conveniently.

VIGOROUS action by the British brought about a partial cessation of the hostilities in most parts of Palestine and the Arabs were beginning to realize that England meant to make good on her pledge to protect the Jews there. But all around the Holy Land there was seething revolt among the Moslems. Floods of propaganda proclamations were scattered among the Arabs of bordering states calling on them to engage in a holy war to help their fellow Moslems in Palestine.

The British colonial office appointed a commission to investigate the race war, but announced that "no inquiry is contemplated which might alter the position of this country in regard to the mandate or the policy laid down by the earl of Balfour in the declaration of 1917 and embodied in the mandate, of establishing Palestine as a national home for the Jews."

FOR a few days it seemed likely that negotiations, conducted in Berlin, would bring about an agreement between Russia and China concerning the Chinese Eastern railroad and perhaps end the threat of war. But the plan failed, at least temporarily, and both nations continued to concentrate their forces on the Manchurian frontier. A late dispatch reached London from Tientsin saying that 3,000 Soviet soldiers had invaded Sinkiang, Manchuria, and were marching on Hl. In the region about Manchouli the Chinese were establishing their first line of defense, but it was believed that in case of serious Russian invasion they will fall back on the passes in the Great Khingan mountains, which have been strongly fortified. Several thousand Russian troops were moved two miles across the border in the vicinity of Manchouli, and there were repeated clashes in that sector.

Both the United States and Great Britain have rejected the Chinese demand that they surrender their extraterritorial rights in China, but in both cases the prospect is held out that such action may be taken later when the Nationalist government has progressed so far that there will no longer be need for the foreign courts.

CAUGHT in a terrific storm over the waste lands of the Southwest, the big Transcontinental passenger plane, City of San Francisco, bound from Albuquerque to Los Angeles, was destroyed probably by a lightning bolt and its five passengers and crew of three were killed. The dead were Mrs. J. B. Raymond of Glendale, Calif.; A. B. McGaffey of Albuquerque, N. M.; Campbell of Cincinnati, Harris Livermore of Boston and William H. Beers of New York, passengers; J. B. Stove and A. E. Deitel, pilots, and C. F. Canfield, courier.

Another aviator killed by lightning was Maj. John H. Wood, noted speed pilot and president of the Northern Airways company. His plane exploded over the desert south of Needles, Calif., and he went down to his death with its wreckage. His mechanic escaped with a parachute.

Pilot T. G. Reid, at the Cleveland air races, set a new record for solo endurance flying and then presumably fell asleep, for his plane crashed and he was instantly killed. Lady Mary Heath, who also crashed at Cleveland and was terribly injured, was reported

as having a chance for recovery. Jimmy Doolittle, crack flyer of the army corps, was practicing for stunts at the Cleveland show when, in a tremendous dive, both wings of his plane crumpled; he went over the side with his parachute and landed unhurt.

Piloted this time by Capt. Ernst Lehmann, the Graf Zeppelin made the return trip to Friedrichshafen with speed and safety. The huge airship was welcomed by premiers and other officials of all the German states and an immense throng of private citizens; President von Hindenburg was prevented from being present by the death of his sister. The Zeppelin's round-the-world flight from its home port was made in 20 days, 4 hours and 13 minutes, establishing a new record.

After conferences at Akron, Ohio, Dr. Hugo Eckener said the Goodyear Zeppelin and German Zeppelin corporations would join in establishing transoceanic dirigible lines. It will require from two to four years to place the ships in operation.

REPUBLICANS of the senate finance committee formally reported to the senate their tariff bill, and the opponents of the measure spent several days jockeying for the best position from which to attack it. The radical Republicans, led by Borah, determined to try to have tariff revision limited to agricultural products, and in this they counted on the support of many Democrats. The radicals also sponsored a joint resolution introduced by Senator Blaine of Wisconsin authorizing all members of congress to have unlimited access to secret corporation income tax returns while the tariff bill is pending. The Democrats through Senator Simmons made it known they would try to obtain the same results by a resolution directing the finance committee to get the income tax information from the treasury.

FOUR hundred officers and men, picked as the best of the army's engineering forces, were ordered by Secretary of War Good to duty in the jungles of Central America to survey the route of the proposed Nicaraguan canal. Their findings and report will go far toward determining whether or not the government will undertake to build that waterway, the estimated cost of which is about a billion dollars. The survey, which will require two years, will be supervised by the interoccean canal board appointed by President Hoover.

CHICAGO mourns the death of two of her best citizens, Judge Frank Comerford of the Superior court, and William E. Dever, former judge and mayor. Judge Comerford, who was in the prime of life, was justly regarded as one of the city's most valuable jurists—courteous, wise, honest and a determined upholder of the dignity of the courts. Elected to the Illinois legislature when but twenty-six years old, Comerford was expelled from that body because of his attacks on corrupt members, but he was sent back by his constituency. Physical disabilities kept him out of the army when war was declared, but he was active in other ways in his country's service. He was elected to the bench in 1920, and presided in several notable cases. Mr. Dever, who lived most of his life in Chicago, was classed as a truly great citizen. He was a leader of Democrats for many years and his record both as judge and as mayor was excellent.

Frederick F. Proctor, builder of New York's first vaudeville theater and originator of the vaudeville chain, passed away in Larchmont, N. Y. He rose from errand boy and circus performer to the high position in the theatrical world which he relinquished last May when he sold his chain of more than twenty theaters to another corporation.

MRS. CALVIN COOLIDGE was given the honor of christening the new light cruiser Northampton Thursday, when it was launched at Quincy, Mass. The name of the 10,000-ton vessel was selected to honor the former President, whose home is in Northampton, Mass. He was unable to be present, however. Secretary Adams represented the Navy department, and Mrs. Coolidge was accompanied by a large delegation of Northampton citizens.

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Cornstalk Tests Show Deficiency

Farmer Is Enabled to Identify Faults in Plant Food and Soil.

(Prepared by the United States Department of Agriculture.)

Cornstalk testing by chemical methods has proved valuable by enabling the farmer to identify deficiencies in the plant food in his soil. Nitrogen, potassium, and phosphorus salts are the plant foods most often found to limit the crop yields. George N. Hoffer, of the United States Department of Agriculture, describes the symptoms and the chemical tests by which the farmer may establish shortages of nitrogen and potassium.

Nitrogen Starvation.

"Corn plants growing under soil conditions of nitrogen starvation," he says, "display a yellowish green to yellow color of the leaves and stalks. By splitting open cornstalks and applying to the tissues a few drops of a solution of diphenylamine in concentrated sulphuric acid the presence of reserve nitrates is indicated by the production of a blue color. The absence of any reserve nitrates is indicated when the chemical produces no change in color. The chemical is applied to the split stalk between the nodes or joints.

"Potassium starvation is not indicated directly by chemical test, but it has been discovered it usually happens that iron accumulates in the joints of the stalk. Potassium deficiency usually shows in marginal leaf firing and by a tendency of the plants to die prematurely or to produce chaffy, starchy ears. Iron accumulation in the joint may be identified by applying to the joint tissues of a split stalk a few drops of a 10 per cent solution of potassium thiocyanate and then adding a few drops of dilute (1 to 2) hydrochloric acid. If potassium is deficient the joints will discolor."

Qualitative Tests.

These tests, Mr. Hoffer makes clear, are qualitative, rather than quantitative. They do serve to show the element which is limiting the best growth and productivity of the plant. When used as a guide for the interpretation of the direction in which increased fertility should be established they are valuable and practical, and the tests may make possible important savings in the fertilizer bill, or else indicate that increased expenditure for some fertilizing element would prove profitable. Testing chemicals are inexpensive and should be used at the time the ears of corn are maturing.

Valuable Constituents

Lost From Manure Pile

A manure pile under the eaves, against the side of the barn, or manure lying for months in an open yard is a sight all too common on American farms. When this product is exposed to the leaching action of the rains, the losses are great, even amounting to half of the total value in periods of two to five months. Obviously, the loss falls on constituents, which are very soluble and therefore are most quickly available to plants.

Through fermentation a large share of the nitrogen in the manure may be dissipated into the air as a gaseous product called ammonia or gaseous nitrogen. The strong smell which every farmer has noticed in close, poorly ventilated horse stables is due to the escaping ammonia produced by the breaking down of nitrogen compounds. In the hot fermentation which takes place in dry, loosely-packed litter, the temperature may rise high enough to cause "fire fanging," when as much as 80 per cent of the nitrogen may be lost. Phosphoric acid and potash are not lost through fermentation, but heavy losses of these constituents may occur through leaching.

Agricultural Hints

Alfalfa is profitable!
A barn protected by lightning rods can laugh at a thunder storm.

Fall-plowed land is best for alfalfa; the plowed soil is firm and compact.

Soy beans are more prolific growers than cowpeas and would benefit soil more in proportion.

Most weeds have little or no feeding value while some are poisonous and some favor the milk.

Quack grass, Canada and sow thistles, and leafy spurge may be killed by spraying the foliage several times with sodium chlorate.

Contrary to former belief and practice, continued cultivation of corn, potatoes and similar crops on moist soils is unnecessary after weeds are eradicated.

The growing of legumes, such as sweet clover, previous to the growing of wheat is a method followed by many farmers that is resulting in wheat of higher protein content.

Trimming, removal of diseased leaves, and discarding injured or diseased specimens are necessary to give the bunch or pack of vegetables a neat appearance and to check the spread or development of diseases.

LOUD SPEAKERS ARE NEW FAD IN GERMANY



A limousine fitted out with a powerful loudspeaker on Lake Templin, Germany. It is not uncommon for private car owners to place loudspeakers on their cars in Germany.

OPERATION COST FOR AUTOMOBILE

Average of \$293 Was Spent by Each Automobile Owner in 1928.

An average of \$293 was spent by each autoist in the United States during 1928 in the operation and maintenance of his car, according to figures compiled by the American Motorists' Association, in co-operation with the Automobile Club of Illinois. Of this sum, \$101, or 34 per cent, was expended for fuel and lubricants, this being the largest item in the autoist's annual operation and maintenance bill. Cost \$1.14 Per Day.

The \$293 figure does not take into account depreciation. The average life of a passenger automobile, according to computation of the federal government, is approximately seven years. During 1928 the average retail price of passenger cars in the United States was \$875, which based on a seven-year life expectancy, would mean an average depreciation of \$125 per year. From this figure, plus the average upkeep cost of \$293, it will be seen that the general average cost of operation, plus depreciation, was \$418 per year, or approximately \$1.14 per day. The comparable figure for 1927 shows that the average cost of operation, plus depreciation, was \$365 for that year, or \$1 per day.

The second largest item on the autoist's maintenance bill is for labor incident to repair work. The cost expended in 1928, for this item, an average of \$82. His replacement parts cost him \$55, while his average tire bill, during the year, was \$34. An average of \$21 was expended for accessories, which with the \$101 spent for gasoline and oil, make up the total of \$293 as the average cost of maintenance for each motor vehicle for 1928.

Comparing Cost.

Comparing the cost of operation in 1928 and 1927 the association's figures show that last year the cost was 28 per cent more than during 1927, when the average operation cost was \$229. Comparative figures, between the two years, however, it is pointed out by St. Mayer, president of the Automobile Club of Illinois and vice president of the A. M. A., do not indicate that operation costs are necessarily increasing, the difference being explained primarily by the fact that with better highways available each year the average autoist uses his automobile proportionately more.

Change in Automobile

Front Is Now Advised

Because of the high mortality of pedestrians being hit by automobiles, Dr. Timothy Leary, medical examiner of Suffolk county, Massachusetts, suggests that the front of the present motor car be changed so that it would not mean death to every human being who came into its path. He says the victims of skull fractures who do not die frequently show mental deterioration, sometimes with a complete change in character, and may be converted from intelligent, capable characters into inefficient semi-invalids. Crippling injuries other than those due to skull fractures add to the indictment.

Cooling Fluid Favored

for New Motor Vehicle

There is a chance that when the automotive engineer starts thinking seriously of reducing wind resistance in the design of the car, one of his first thoughts will concern the new cooling fluid developed for airplane engines of the water-cooled type.

A tremendous reduction in the size of radiators for this type of plane engine has proved entirely feasible. That such an eventuality might come in motordom is by no means out of the question.

It will mean leaving the anti-freeze in the radiator the year around. Some motorists do it now, through indifference, not wisdom!

THE MOTOR QUIZ

(How Many Can You Answer?)

Q.—What product ranked first in the export of manufactured articles?
Ans.—Automotive products, with a value of \$500,174,431.

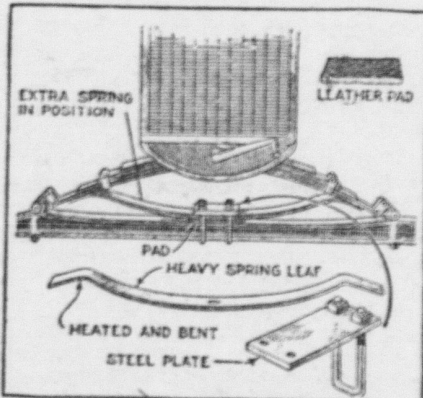
Q.—What was the amount of the motor vehicle tax collected in 1927?
Ans.—About \$808,000,000.

Q.—What state has the most automobiles in proportion to the population?
Ans.—California, with one car for every two and seven-eighths persons.

Q.—When an engine can be cranked easily by hand, yet the starting motor works sluggishly, what trouble can be looked for?
Ans.—Discharged battery, worn brushes or dirty armature. Examine ignition system.

Preventing Front-Spring Breakage in Light Cars

Frequent breakage of front springs in light cars can be prevented by the provision of a heavy spring leaf, bent to the shape shown and attached to the front axle by means of two U-



Extra Spring Leaf, Attached to Front Axle, Supports Front Spring in Light Car.

bolts and a tie plate. A leather pad, placed between the extra spring leaf and the axle, provides a certain amount of resiliency.—G. A. Luers, Washington, D. C., in Popular Mechanics Magazine.

Practical Suggestions

for Curing Sick Auto

When a car lacks its usual snap and get-away, check for the following:
Manifold gasket leaks.
Improper valve clearance.
Leaky past piston rings.
Faulty carburetor adjustment; high or low float level.
Shortage of fuel due to clogged line or screens.
Fouled or improperly gapped spark plugs.
Worn or improperly spaced breaker points.
Early or late ignition timing.
Dragging brakes.

In practically every case loss of power and poor get-away are cured by attention to the above, Frank Nutt, research engineer, says.

AUTOMOBILE NOTES

A wrong tilt of the front axle will cause hard steering and wheels to shimmy.

Sticky valves and a lean mixture make a poor combination and often a dangerous one.

Somewhat we cannot see that equipping autos with radio is going to make driving any safer.

A man never knows how careful he can be until he starts breaking in a new automobile or wearing a pair of white shoes.

A jay-walker in an automobile-congested street ought to be grateful for the euphemism under which his case is ticketed at the hospital.

The number of automobile tire casings increased in the United States from 6,000,000 in 1913 to 77,000,000 in 1928, the Rubber Manufacturers' association reports.