

Research Work by Engineers

Agencies Co-operate in Effort to Salvage the Knowledge Gained in World War.

CONDUCT INDUSTRIAL STUDY

Special Committees Are Formed to Collect and Disseminate Information—Hundreds of Big Plants Fostering Research Work.

New York.—America is entering on an era of industrial research in which corporations, large and small, are linked with government agencies, engineering organizations and universities, in a systematic effort to salvage the knowledge gained in war and to awaken the nation's latent industrial and economic power. Hundreds of plants are fostering these researches, for which a permanent national system is being worked out by Engineering Foundation, an instrumentality of the United Engineering society to advance the rapidly developing science of engineering.

It is only recently, however, that research has become a really national undertaking.

Activity in industrial research must be co-ordinated and expanded, said Robert M. Raymond, professor of mining in the schools of mines, engineering and chemistry of Columbia. The university, said Professor Raymond, is now conducting industrial research which will be of great value to the nation. Prof. Arthur M. Greene of Rensselaer Polytechnic Institute, Troy, N. Y., chairman of the research committee of the American Society of Mechanical Engineers, took the same view.

For Specific Research.

This committee, Professor Greene explained, is accomplishing its work by organizing special committees for specific research and by collecting and publishing research information. The American Society of Mechanical Engineers is one of the four founder societies for which the United Engineering society holds certain endowments. Engineering Foundation, devoted to research, under the leadership of Charles F. Rind of this city, past president of the American Institute of Mining and Metallurgical Engineers, is a department of United Engineering society, the other organizations which it comprises being the American Society of Civil Engineers, the American Institute of Mining and Metallurgical Engineers and the American Institute of Electrical Engineers.

"The life of every American citizen and the destiny of the republic will be vitally affected by the work in industrial research now going on," said Professor Raymond, who is a member of the Engineering Foundation board, representing, with Prof. Joseph W. Richards of Lehigh university, the American Institute of Mining and Metallurgical Engineers.

"Researches already conducted at Columbia and on which work is now progressing," Professor Raymond added, "enabled Prof. William Campbell, professor of metallurgy in the schools of mines, engineering and chemistry, to ascertain within a few hours just what was the mechanical defect in the shafts of the German ships which were overhauled in New York harbor. As a result of the experiments he is making in testing the construction of metals, Professor Campbell can immediately tell, for example, in what process the defect in a piece of steel arose, and can inform the manufacturer how to correct the fault.

"Columbia has recently equipped an ore-dressing laboratory, in which Prof. Arthur T. Taggart is conducting experiments in the filtration of ores. The laboratory is so equipped that both large and small quantities of ore can be studied. Another Columbia professor, Edward F. Kern, assistant professor of metallurgy, is conducting experiments in the treatment of ores. Industrial research is also being carried on in several other important fields at Columbia, notable examples of this being the work of Michael E. Pupin, professor of electro-mechanics at Columbia, and Walter I. Slichter, professor of electrical engineering.

"The assertion by government experts that this nation's supply of crude oil cannot last for more than 20 years makes increasingly important experiments conducted at Columbia a number of years ago to determine the amount of gasoline which can be drawn from crude oil and the by-products of the oil. Research work of enormous value to the nation should be done immediately to ascertain if a larger percentage of the crude oil could not be used for gasoline. It would be possible to continue this

House Shortage Growing Worse

Latest Statistics Show Amount of Building So Far This Year Less Than Year Ago.

LARGE CITIES OVERCROWDED

Lack of Price Stabilization One of the Chief Causes of Slowing Up of Construction Work—Little Hope for Drop in Prices.

New York.—"As we advance into the new year it becomes constantly more apparent that no problem is more urgent need of an early and wise solution than that which is involved in the nation's housing situation," says S. W. Straus.

"From the most reliable statistics obtainable at this time the actual amount of building accommodations throughout the country are considerably less than they were a year ago. While the figures indicate an increased cost of new building contracts awarded during the year 1920 of about 5 per cent, as compared with 1919, this was more than discounted by the added cost of building construction and the loss of available space through fires and deterioration. In brief, the country is going backward in its housing equipment.

"Overcrowding in the large cities has reached such a serious state that health authorities are sounding an alarm. These unwholesome conditions also develop social unrest and lawlessness, and it is apparent that every possible agency should lend itself to the work of helping in the practical solution of this grave problem.

Building Projects Held Back.
"It is to be hoped that a large building movement will start this spring and summer, but no one can tell what developments may arise meanwhile. Lack of price stabilization has been one of the chief causes of the slowing up of construction work since the armistice. Vast amounts of building

Owes Wife \$2,000 for Unpaid Profanity Bill

John Saleeby, wealthy Syrian lace importer of New York city, owes his wife \$2,000 for cursing, according to testimony she offered when she had her husband arrested for disorderly conduct.

Mrs. Saleeby said she had an agreement with her husband whereby he was to pay her \$10 every time he swore but that he had "cussed" 200 times without paying up. The arrest followed an alleged attempt of Saleeby to strike his wife. Saleeby was denied the charge, but was placed on probation for six months.

work at Columbia, the logical place for it, if sufficient funds were available.

"Conservation of the nation's resources, which, it is commonly agreed, we have been using with too lavish a hand, is the direct result of a large amount of research work now being done. Big industrial corporations are taking cognizance of this and introducing new methods for the handling of materials. The United States Steel corporation, which mines the coal from which they make coke to be used in the manufacture of steel, is one of the enterprises which has changed its methods as the result of research."

projects have been held back because of the feeling that building costs would recede later. However, experience has shown that those who waited have gained nothing, while those who went ahead with their plans have no cause for regret. During the last year the amount of work projected was about twice as much as the amount of actual operations.

"The uncertainty as to future price tendencies constitutes one of the most unfavorable factors in the situation today.

"The feeling is being fostered by the slump in prices in many commodities. It should be borne in mind, however, that conditions incorporated in the general range of commodities and those in the housing situation are not analogous. The processes of liquidation such as we have witnessed lately with regard to general merchandise cannot include the building commodity. Merchants can move their stocks of merchandise from their shelves by cutting prices, and there always is more or less fluctuation in these lines. Housing space, however, is generally leased on a basis of one year or more. During periods of retrenchment, such as we have witnessed in this country during the last six months, housing, therefore, is affected less than any other commodity. People can quickly adjust themselves to economies in clothing, food and other requirements of their daily lives, while business concerns can reduce quickly operating costs by putting into effect general economies. But in neither instance is it generally possible or advisable to curtail expenditures for housing space.

No Benefit in Delay.
"Some of the abnormal prices and bonuses which have existed in the construction business will not continue to be paid, but general fundamental conditions at this time do not indicate that there is wisdom in withholding building operations.

"The basic influences which may be expected to exert their force against lower building costs may be summarized as follows:
"Unprecedented demand throughout the country for housing facilities of all kinds.
"Shortage of highly paid skilled laborers in many of the essential building trades.
"Tremendous increases in business, with a corresponding increase in necessary building equipment, after the present period of readjustment and liquidation.
"General tendency toward readjustment to higher levels of income from property.
"Export demand for American building materials as conditions improve abroad.
"Insistence of public on constantly improved standards of living, with corresponding demand for more costly equipment."

AUTO TOO RISKY FOR AIR ACE

Charles Nungesser, French War Hero, Gives Up Car After It Kills Bicyclist.

Paris.—Charles Nungesser, the French "ace" who ranked second to Fonck as a successful military aviator during the war, and who has been prominent at aerial meetings since the armistice, has decided to give up driving his automobile, saying it is too dangerous and expensive.

Nungesser was racing through Neuilly recently when he knocked down and killed a bicyclist, as a result of which the court ordered him to pay the widow of his victim 30,000 francs (normally \$5,000) for damages.

"I think I'll stick to my airplane hereafter," he told the judge. "If anything breaks, then I'll be the only one to suffer."

NEBRASKA IN BRIEF

Timely News Culled From All Parts of the State, Reduced for the Busy.

SCORES OF EVENTS COVERED

Hastings guardsmen are to have a new armory.

The Fairfield community club has one hundred members and is out for more.

Howard county claims the largest chicken hatching industry in Nebraska.

The Annual Encampment of the State G. A. R. will be held at Hastings May 23 to 25.

A near epidemic of influenza and whooping cough is sweeping the vicinity of Callaway.

Fremont jobbers have been restored to equal shipping advantages with Omaha and Lincoln.

Fire in the Johnson drug store at Madison damaged the building and stock to the amount of \$5,000.

Mr. and Mrs. Justus E. Wheeler of Clay Center, celebrated their fiftieth wedding anniversary last week.

The State bank is a new addition to Petersburg business. It is the third financial institution for that place.

Farmers in the vicinity of Rohrs have been reporting the loss of much young stock, presumably by coyotes.

County Clerk F. N. Slasson of Lodgepole has paid out \$810 in coyote bounties for the death of 270 animals.

At a special election held at Verango bonds for the erection of an \$80,000 high school building carried by a vote of 95 to 7.

T. V. Norvell has been appointed United States commissioner for the Norfolk district to succeed the late John R. Hays.

The annual report of State Fire Warden Hartford shows that the loss from fires in Nebraska for 1920 amounted to \$2,679,029.

Mrs. S. A. Page, a 70 year old Page woman, has invented an attachment for a sewing machine which will simplify the twisting of yarn.

Five hundred life insurance men of Nebraska, Iowa and South Dakota are expected in Omaha February 15 for an annual congress of agents.

Hubbell is erecting a new community hall, modern and up-to-date in every respect, with a full basement underneath the entire building.

Charles H. Friedrich of Lincoln was elected president of the federation of Nebraska retailers at the Omaha session of the annual convention.

Total cash gifts from Nebraska for American relief of starving children in Europe are \$82,110.94, as announced by G. W. Wattle, state chairman.

Chadron's \$50,000 paving bonds have been sold at Chicago at par. The county commissioners will call an election on \$150,000 road bonds soon.

The high cost of paving and the difficulty of disposing of paving bonds have checked such improvements in most cities and towns of Nebraska.

A recent government report credits Cheyenne county with having produced in 1920 more wheat than any other county in the United States.

It has been decided by the Pawnee city council that paving which was to have been started early in the spring will be postponed until a later date.

Representatives of Oklahoma oil companies have been acquiring leases on tracts between Angola and Bayard and expect to begin operations soon.

E. R. Danielson of Osceola was elected secretary of the Nebraska board of agriculture for the fifth time at the meeting of the board at Lincoln.

Following live stock losses, which farmers say will run into the thousands, a county-wide wolf and coyote hunt is being planned for Table Rock.

Eighteen wolves have been killed in neighborhood hunts near Elwood. The animals have become so numerous that they are annoying and causing much damage to stock.

Nebraska lumber dealers will hold their annual convention in Omaha February 9-10. Last year 850 dealers attended the convention. More are expected this year.

Albert Fluett of Du Bois claims to have a coal vein 12 inches thick in his pasture. For five winters he hauled this Nebraska coal into market in Humboldt and Pawnee.

The first annual birthday party of the Aurora Rotary club was held last week with the wives of Rotarians guests. Stunts of all kinds were pulled off. Every Rotarian with one exception was present.

What is said to be the heaviest baby ever born in Franklin county arrived at the home of Mr. and Mrs. Harm H. Harris near Upland. It was a boy and weighed seventeen pounds. It is the ninth child in the family.

Fruit growers of Holt county have begun to express alarm over the present springlike weather. Trees already are showing signs of budding and sap beginning to flow.

Miss Dorothy Davis, instructor in mathematics and girls' physical education at the Columbia high school will teach next year in the Isle of Oahu, one of the Hawaiian group.

The eleventh annual session of the county treasurers of the state was held at York last week.

Willard Hansen, a pioneer resident of North Platte, who was custodian at the high school for thirty-six years, died at a local hospital after an illness of one week.

Having won its right to choose any bid for state building contracts, in an opinion of the Nebraska supreme court, the state board of control has announced that it will readvertise for bids on the new hospital at the Milford soldiers' home, for which the last legislature appropriated \$100,000.

The American Legion at Cozad has begun a drive for 100 per cent membership. An athletic carnival netted nearly \$200.

Several gallons of liquor taken by the sheriff and police force in Blair in raids during the past few days have been destroyed.

An attempt to revive the Baptist church at Ord, which has been closed for nearly two years, is being made by the Rev. M. Edson.

Denn Foucht, employee at the state hospital for the insane at Lincoln, was accidentally electrocuted while cleaning a boiler in the power house.

Burglars took 45,000 cigarettes, 200 cigars and 210 pounds of tobacco from the Raymond Bros.-Clarke Grocery house at Lincoln one night last week.

Fairmont is making an effort to secure the headquarters of a machine gun company. The project is being pushed principally by ex-service men.

Everett Heier of Murdock suffered the loss of his left eye when a piece of cartridge, which he had exploded with a hammer, penetrated the member.

Horses and cattle sold at the Kemp sale near Wymore brought high prices, according to sale officials. Cows brought from \$70 to \$87.50; a team sold for \$323.

Arrangements are about completed for the annual state conference of the Daughters of the American Revolution, which will be held in Columbus March 15, 16 and 17.

Robert Arthur Grothe, a 9 year old Lincoln boy, was instantly killed when a heavy coal truck backed over his body after the lad had hooked his sled on the auto for a ride.

A heavy blanket of snow now lies over most of the winter wheat of Nebraska and the farmers are rejoicing. The downfall was much lighter in the eastern section than in the west.

Grain is moving now at the rate of over ten million bushels a month from Nebraska. Nearly three hundred cars a day are being handled by the Burlington's Nebraska district and the other roads report an increased run of grain.

D. Burr Jones, state director of the Near East Relief, has announced that corn for shipment to Armenia and the Holy land will be accepted by the organization, if there are farmers in Nebraska who desire to contribute to the relief.

A half dozen Hastings merchants are holding checks given them by a stranger, but which the bank refuses to cash because the gentleman has no funds on deposit. Meanwhile he has disappeared.

Dan Redmond, a farmer residing near Oconto, suffered a double fracture of the left leg, between the ankle and the knee, when the horse he was riding fell and caught the member beneath his body.

Mrs. Mary A. Caldwell, who has been chosen president of the board of trustees for the Odd Fellows' home at York, has been a member of the board for fifteen years, and has devoted much time to the interests of the institution and its charges.

His mind unbalanced as a result of a hallucination that he was being haunted by spirits, Robert J. Fauphey, a painter, shot himself through the right temple in a room at an Omaha hotel. Death was instantaneous.

Milton Kreifels, a resident of Paul, a village south of here, was seriously injured when a ladder which he was using to take chickens from a tree slipped and he fell across a wagon wheel, breaking his left wrist and several ribs.

A committee of citizens at Wareham have asked the railway commission to require the Burlington road to maintain an agent and furnish a depot for that place. Freight is billed to and from Randolph, a station five miles away.

Examination of the stomach of Gus Bathke, who died at Norfolk recently, supposedly from drinking poisonous whisky, disclosed the fact that there was considerable wood alcohol in the organ, according to word from the state university medical hospital.

Half the \$760,000 state hail insurance losses incurred in 1920 will be paid on February 15, under arrangements worked out by Governor McKelvie and State Auditor Marsh. The remainder will be held until collection of all state taxes.

Merchants of Wymore, through the Community club, are asking for a re-rating of insurance in the business district. They believe that \$6,000 annually can be saved because of the improvement in fire prevention methods since the last rating was made four years ago. There were but five fires here last year.

The Nebraska agricultural experiment station at the college of agriculture now claims one of the best dairy herds in the country. In the twenty years of its existence it has developed eight cows that produced an average of 903 pounds of butter in one year.

H. H. Sheldon of Columbus, who recently had a fine bunch of cattle at the South Omaha stock yards, said there would be an increased swine production in his neighborhood next spring as nearly all of the farmers in that section are breeding more sows for spring farrowing than they have for several years.

The Big Seven racing circuit has been organized with Fred Lamers of Winner, president, and Charles Trimble, Omaha, secretary. Omaha dates for the race are June 3 to 10, inclusive. Other towns are Hartington, Winner, Bonesteel, Bassett, O'Neill and Neligh.

The retiring of all automobile license fees by the county in which they are collected with the exception of 5 per cent which would be turned over to the state for administrative purposes, was favored by the eleventh annual convention of Nebraska county treasurers at its recent session at York.

DOWN TO BUSINESS

BILLS HAVE ALL BEEN INTRODUCED FOR SESSION AND BIG GRIND BEGINS

MANY IMPORTANT MEASURES

Solons Will Be Kept Busy for Several Weeks Sorting Over and Taking Action on Deluge of Bills in Both Houses

Lincoln—When the time limit for filing bills in the senate was reached a total of 349 bills had been introduced to that body. With the 617 bills introduced in the house it is evident that a lot of hard work is to be done before adjournment of the fortieth Nebraska legislature. Both the house and senate have settled down to the task, and each session finds some bill voted out, while others take form as laws that will eventually find their way into the statutes of the state.

There seems to be a mutual agreement in both branches of the legislature to conduct an economy campaign as far as salary increases are concerned. Practically every bill bearing on this subject is due for thorough investigation and where action has been taken, the asked for increase has not been granted. Sentiment is also strong against the passage of any measure that will mean increased taxes for the people of Nebraska. Several bills dealing with this important subject have already been killed or so materially changed from their original form that if they do become laws the tax payers of the state will not be loaded down with added taxation.

Favor New Compensation Law

A disposition to broaden the scope of the workmen's compensation law was indicated by the Nebraska state senate in reporting progress of the department of labor's bill adding firemen and appointive peace officers to the list of possible beneficiaries.

Since deputy sheriffs are included in the proposed changes, sentiment was expressed in favor of including sheriffs, excluded in another old section of the law drawing the line at elective officers.

Combine Investigating Committees

Two legislative committees which have been pursuing different lines of investigation with respect to the qualifications of the six code secretaries and the general work of the code departments have decided to consolidate their activities and continue the probe jointly. In the meantime, action by the legislature upon the confirmation of the secretaries, reappointed by Governor McKelvie, is held up.

Would Bar Japanese Land Owners

The question of whether or not orientals are likely to become a menace in Nebraska, is covered by the Davis bill, which would deprive aliens ineligible to citizenship of owning Nebraska land.

There are approximately 500 Japanese in the state and the amount of farm land to which Japanese hold title is estimated at 1,280 acres.

To Wipe Out Duplicate Laws

It is about to be called to the attention of the Nebraska lawmakers that twelve statutes passed by the 1919 legislature covering 200 printed pages are duplications of laws embodied in the civil administration code.

The suggestion is made that committees on correlation be appointed to repeal the duplicated measures.

Kill Bill for Pay Increase

Sentiment against increasing salaries of public officials and employes was strong enough in the Nebraska house to kill the bill repealing the limit of \$1,800 per year for the board of control's secretary, and permitting the board to fix his pay.

Every Member Introduced Bill

Every member of the Nebraska house took a hand in the introduction of bills at this session of the legislature. Usually there are a few solons who put in no measures of their own but not one missed out on getting a bill into the hopper this time.

Vote Against July 4 Pardons

No more Fourth of July pardons is the unanimous sentiment of the Nebraska representative assembly, expressed in the passage of the Epperson bill doing away with them. It is expected to pass the senate also without opposition.

State Board Buys Shoes

The state board of control has just purchased 200 pairs of work shoes for the Nebraska penitentiary at \$3.05 a pair, which the board says is about \$1.50 lower a pair than at the peak of prices, wholesale.

No Firearms for Aliens

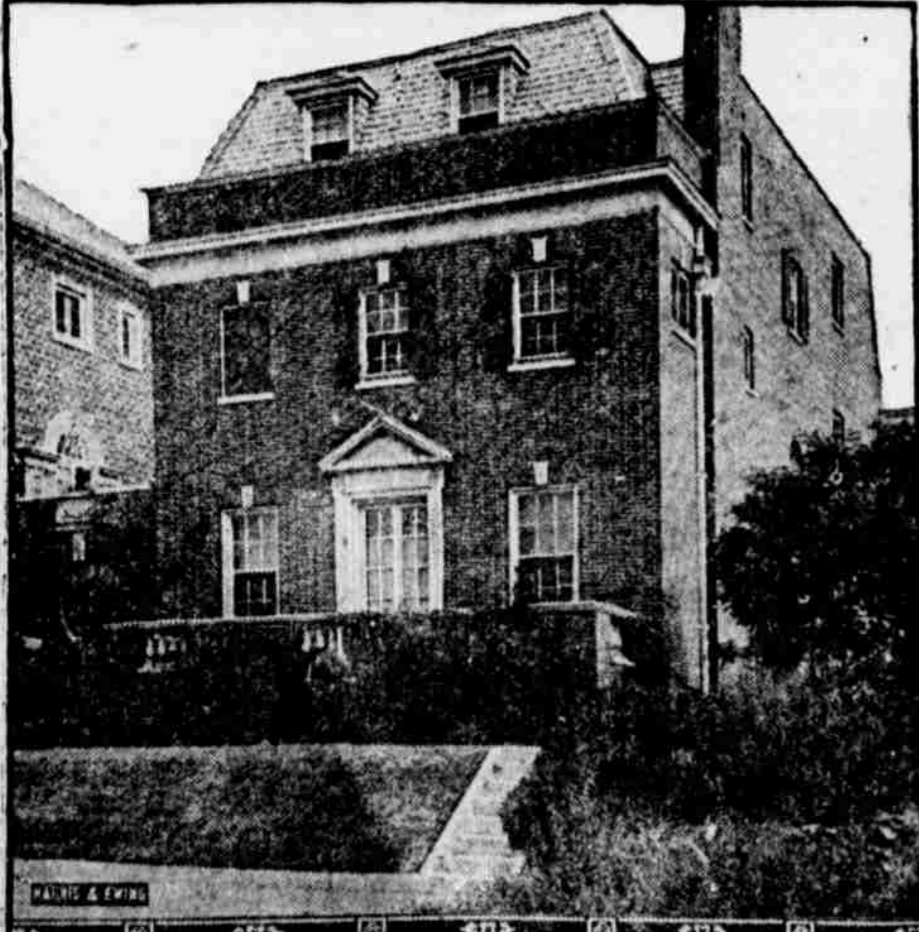
If the state senate has its way aliens will not be permitted to carry firearms in Nebraska, nor will they even be allowed to own or possess firearms of any kind.

House Passes Banking Bill

The house has passed a banking bill which presents numerous amendments to the present banking law and seeks to put the crook out of the banking business and keep him out. It has been described as a bill to safeguard the public in general.

It provides that each and every person in any way connected with the operation of a bank shall be guilty of felony if he embezzles any of the funds, wilfully misapplies them or commits any act with intent to defraud the bank.

Where Mr. Coolidge May Reside



The high cost of Washington rentals which confronted Vice President-elect Coolidge, has been solved by President-elect Harding. The Harding home at 2314 Wyoming avenue, has been offered the Coolidges. Friends of Mr. Coolidge say he will probably accept the offer. The house is unpretentious but spacious, and well suited for entertaining.