FACTORY RESEARCH SHOWN AS DECISIVE FACTOR IN VICTORY

U. S. Industrial Experts Contributed Greatly To War Success.

NEW YORK, May 14.—Research silently set in motion in a few great American industrial plants was one of the chief factors in the allied victory over Germany, it was declared yesterday in a statement by the Engineering Foundation, disclosing how new methods contributed huge stocks of explosives and other material to the army under Gen. Foch.

Improved devices for loading shells enabled a few men to do the work of thousands, millions of gallons of alcohol and bushels of corn were saved, and the time required for making "powder" was cut from months to days. Nickel, whose only use once was for the humbler coins of the world, was, it was stated, an element of prime importance in Germany's downfall.

Tells of Value.

The Engineering Foundation, announcing that it is working with the division of engineering of the National Research Council to promote a national system of industrial research, made public yesterday through its secretary, A. D. Flinn, a symposium of evidence on benefits to industry resulting from research scientifically carried on.

Dr. Chas. L. Reese, chemical director of the E. I. du Pont de Nemours Co.; A. J. Wadhams, general superintendent of the National Nickel Co.; Prof. Joseph W. Richards, in charge of the department of metallurgy of Lehigh University; Prof. Michael I. Pupin, of Columbia University; J. Vipond Davies, president of the United Engineering Society; H. Hobart Porter, of Sanderson and Porter, vice president and general manager of the Brooklyn City Railroad Company, and George H. Pegram, of the Interborough Rapid Transit Company, were among those who urged the need of research on a large scale if America was to reap the full benefits of the war and continue as an industrial nation of the first rank.

The du Pont Company and the International Nickel Company, Dr Reese stated, were able to make great contributions to the winning of the war by the fruits of research which had been going on long before the outbreak in 1914. Their aid began with the allies long before America participated.

Work of du Ponts.

The du Pont Company furnished inconceivable quantities of explosives to the allies and the United States, and in spite of mounting wages and the rising cost of living, actually reduced the price of "powder," according to Dr. Reese.

The National Nickel Company supplied practically all the nickel used by the allies, including the United States, as a necessary ingredient in steel for armament, munitions and bayonets.

"Research in the du Pont laboratories, which had its beginnings more than a century ago, made the manufacture of explosives safe, and further reduced the chances of loss of life or personal injury by the substitution of machines for hand labor in operations that had been hazardous," said Dr. Reese.

Saving in Time.

"It cut the time for making 'powder' from months to days. It led to production of sulphuric acid and to material used in the dye industry in huge quantities, which are essential also for the manufacture of explosives for national defense. Research made possible the construction of acid plants without the great lead-lined tanks and pipes formerly believed to be necessary; it substituted the cheap and quickly available iron nad steel, saving the labor of thousands of lead burners, a very special type of skilled labor, of whom the thousands that would have been required did not exist.

"Research produced mechanical means for loading the high explosives safely and rapidly into shells, making possible the production in relatively small plants of the great numbers of shells demanded by the artillery, and it loads the shells with a few men instead of thousands. It saves millions of gallons of alcohol required for the manufacture of explosives, and, consequently, saved millions of bushels of corn at a time during the war that this food supply was sorely needed."

Progress of Nickel.

The progress of nickel as a commodity, as told by Mr. Wadhams, revealed how the accidental element in research made possible the progress of the now highly valuable commodity. "Within the memory of middle-aged men, the standing of nickel among metals was hardly above that of a nuisanec to the producer of copper, especially from certain ores. Its only use was for the humbler coins of the world. It could buy a shine, a drink, or pay a far fare, but had few other functions except for the small quantity used for placing other metals. It was only after years of research and many disappointments that economical and successful methods were discovered for separating nickel from copper, and then no one knew quite what to do with it.

Use Discovered.

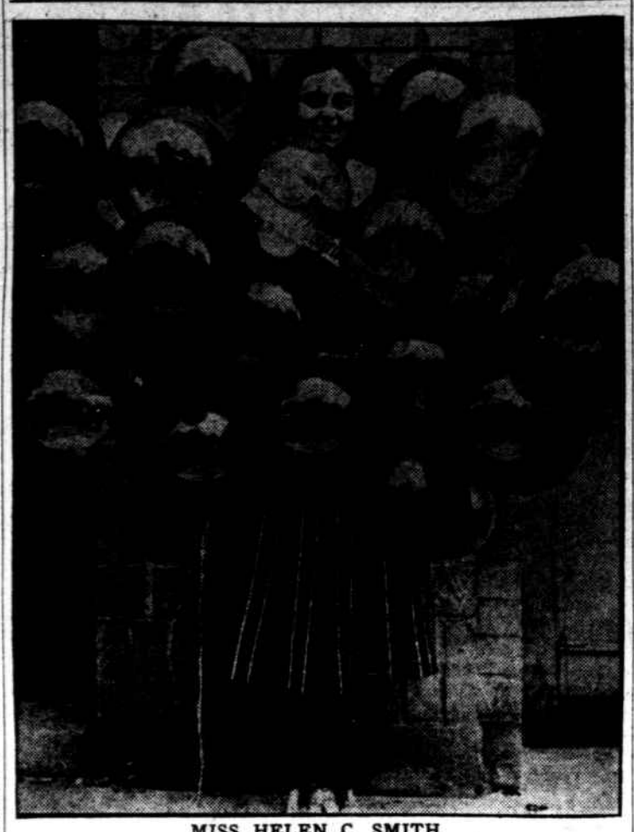
"In the early '80s it was discovered that steel alloyed with nickel was useful in refrigerating apparatus. About that time a cholera epidemic occurred in our Southern States and it was believed at that time that the cholera germ could not survive at low temperatures. Congress passed a bill providing for the construction of a nickel-steel ship in which a refrigerating apparatus could be installed, so that the cholera victims could be kept aboard this ship under low temperatures. The attempts to carry out this contract led gradually to the large use of nickel for alloying with steel for many purposes, and of course was a vital element in war equipment."

Specialists Enlisted.

The National Research Council's Division of Engineering and Engineering Foundation, the president of which is Charles F. Rand, of New York, has enlisted many of the nation's research specialists and executives in leading industries to prosecute a permanent national movement to stimulate research in the industries and to bring about co-operation in the acquisition of new scientific knowledge for dissemination among engineers and managers of American industry. Aiding in the work are the great national societies of Civil, Mining and Metallurgical, Mechanical and Electrical engineers.

A fund of many millions is being used under the direction of Mr. Rand to put American research on a scientific and enduring basis.

THOUSANDS BUY BALLOONS



MISS HELEN C. SMITH,

Of the Friends' School team, who aided in gathering funds for the Salvation Army budget yesterday by selling balloons in front of the White House. Thousands of contributions were made to the budget yesterday when "Tambourine Day" was celebrated. It was estimated that nearly 2,000 balloons, 8,000 tags and 2,000 lollypops had been purchased in aid of the fund.

$50,000 RELIEF GIFT NOT FOR USE IN SHELLED AREA

Friends' Committee Receives Biggest Donation To Aid Polish.

PHILADELPHIA, Pa., May 15.—A Maine man, now in California, has sent a check of $50,000 to be used by the American Friends Service Committee, 20 South Twelfth street, for relief work in Poland. It is the largest individual donation that the Friends have ever received.

The donor, who wishes his name withheld, makes the following conditions regarding the use of his gift: "The money shall not be used for agricultural work, reconstruction, tools, seeds or implements for same in areas that have been under shell fire on account of the danger from unexploded shells. Again, we often hear of students on the continent joining uprisings. Should the students whom you are helping be of this class and show a tendency toward Bolshevism, then I should not wish my money to be used there."

Will Help Refugees.

The Friends will be able to utilize this great gift in the extensive program of relief which they are conducting for former citizens of Poland. These refugees are now returning from Russia at the rate of 8,000 a week, hungry and destitue, and the Polish government, hard beset for funds, is able to make no provision for them. The money can also be used in part in relief for children in the cities of Poland, a task which the Friends have undertaken in co-operation with the American Red Cross and the American Relief administration.

The student relief to which the donor makes reference, is in the form of aid to student kitchens supplementing the meager food supplies hitherto available. The Friends until recently have been the only organization engaged in this important task, which is making possible the return of promising young men, who have been from two to ve years in the army, to the cafive years in the army, to the careers for which they were destined

Suffered During Winter.

The Friends' agricultural reconstruction in the devastated area is being carried on in the Hrubieshow district in the neighborhood of the Bug River. Considerable supplies of clothing have been distributed here during the past winter to sufferers from the unceasing warfare, their last affliction having been the Bolshevik invasion of August and September, 1920. They have been almost stripped of horses, farming implements, seed and even of food, while a large proportion of their houses have been destroyed and not yet rebuilt. Throughout this area stark naked children of tender years have been spending the past winter on the top of the big clay Russian stoves, fearing to get down, lest they should freeze. Enormous quantities of clothing must be collected in America this summer in order that the conditions of last winter may not be repeated.

The need of food is being met by the American Relief Administration with the funds received during the recent drive, but the agricultural needs are far beyond the means of either the Polish government or the relief organizations to supply. Without plows, horses and seed, the food conditions next winter will be no better than they have been the past year.

Catholic Press Ass'n Elects at Final Session

Delegates to the national convention of the Catholic Press Association, held in the chambers of the National Catholic Welfare Council yesterday, elected Claude M. Becker, of "The Tablet," Brooklyn, N. Y., president of the organization, at the closing session.

Other officers elected were: Nicholas Gonner, Dubuque, Ia., vice president; John Paul Chew, St. Louis, treasurer; J. A. M. Richey, Garrison, N. Y., secretary; directors of executive board, Dr. Thomas P. Hart, Cincinnati; F. W. Harvey, jr., Chicago; and Rev. John F. Noll, Huntington, Ind. Fifty delegates attended the two-day session.

RICH RUSSIANS WASTE WHILE OTHERS STARVE

Condition of Paris Refugees Offers Striking Contrasts.

PARIS, May 14.—Of 1,500,000 Russian refugees in Europe and the United States two-thirds are living in abject misery, according to George London, the famous French investigator.

Others there are whose exile is no more annoying than a prolonged sojourn on the Riviera or in spacious mansions on the Avenue du Bois de Boluogne at Paris. These are those who had their wealth in European or American securities and who consequently have gained instead of lost.

Careless of the unhappiness of their country or of their fellow-countrymen in misery, these wealthy exiles live in ostentatious fashion and have achieved the reputation of being the greatest gamblers on the Riviera. Fortunes which would ensure the food of thousands of starving Russians are thrown away on the red and black in the gaming rooms nightly.

Others Not So Lucky.

The other side of the picture is a saddening one. In the quarter of the temple, one of the poorest quarters of Paris, is a little metal factory run by the Union of Zemstovs. Sitting at a workbench, his feet in woden sabots and wearing a smock made from sacking, sits daily an old man who formerly was Gen. Alastof, chief of staff to the governor of Moscow.

In a sweatshop in the Bastille quarter four Russian women work ten hours daily making cheap hats. They are Mme. de J——, who carries one of the most famous names of Russia; Mme. V——, the wife of a former deputy to the Duma; Mme. I——, wife of a Russian general, who is now a chauffeur. The wife of another Russian general also worked in the same place but left it to take a job as maid of all work.

Another Washes Dishes.

Still another general's wife washes dishes in a boulevard restaurant. Mme. Pashovka, whose husband was for a long time private secretary to Czar Nicholas, gains a meager living for herself and her three children by teaching the piano. All four live in one room.

Professors of Petrograd universities can be seen sweeping the Paris streets and selling newspapers. Serge Terekerina, once president of the Bank of South Russia, is now a clerk earning $12 per week in the Bank of the Seine. He is 70 years old.

Viora Ridischkina, a countess in her own right and wife of a Russian dramatist of note, recently died from starvation in squalid lodgings in the Clichy quarter.

And down at Cannes, Biarritz, Nice and Monte Carlo grand dukes and petrol kings toss fortunes away nightly over the roulette and baccarat tables.

Victory Clasps for Navy Men.

An additional supply of Victory clasps has been received at the local recruiting station for issue to all former navy men who served in the danger zone during the war. The clasps are to be attached to the ribbon of the Victory medals and denote the duty performed by the navy men. Applications for the tokens should be made at the navy recruiting station, 306 Ninth street northwest.

Sues Railway for $50,000.

John P. Fitzgerald filed suit yesterday in the District Supreme Court against the Washington Railway and Electric Company for $50,000 damages for aleged personal injuries. Through Attorney Daniel W. O'Donoghue, the plaintiff alleges that on June 29 last, while driving a bread wagon across the company's tracks near Bethesda, Md., a street car collided with his team and seriously injured him.

Would Bar Negro Recruits.

Discharge of all negroes in the army and navy and prohibition of enlistments is provided in a bill introduced in the Senate yesterday by Senator Caraway, Democrat, of Arkansas.

HOME BUILDERS REPORT GROWTH DURING THE YEAR

C. Clinton James Returns From Convention at New Orleans.

C. Clinton James, president of the Building Association Council of the District of Columbia; Albert Shulteis and William S. Quinter, who were delegates to the United States League of Local Building and Loan Associations national convention, held in New Orleans April 29 and 30, report that the convention was one of the most successful held in the history of the organization.

C. Clinton James was elected assistant secretary of the United States League.

Report Savings.

The building and loan associations of the United States had a most remarkable and unprecedented growth last year, both in assets and membership. Although they had during 1919 made the largest gain ever recorded in a single year, the figures for 1920 indicate that the increase in assets for that year is larger than the gain made in the two preceding years, while the growth in membership was almost equal to that of the preceding three years.

This would seem to indicate that during the period of war-time prosperity, with its high wages and reckless spending, the frugal members of building associations, at least, were able to and did lay aside a larger percentage of their earnings than usual for the proverbial rainy day.

Loans on Increase.

"With the increased funds which these associations had at their disposal, they were enabled to make a larger amount of loans to those needing assistance to build or buy homes, and yet they could not meet all the demands which were made upon them for this purpose," said Mr. James. "The building and loan associations are rendering a great public service to the community in promoting thrift and providing homes, for which they are particularly well fitted, and they are really the only practical agency through which the housing situation can be solved, because these institutions are nearer the working people, best understand their needs and have a workable plan to help them.

Do Real Service.

"The good that these associations are doing is apparently now being more fully appreciated by the public, and the great prosperity they are enjoying is, indeed, well merited.

"There are in the United States 8,633 building and loan associations with assets aggregating $2,519,914,971, which is an ncrease of 519,914,971, or 18.49 per cent, gain for the year. The total membership is 4,962,919, an increase of 673,593 for the year, or 15.77 per cent. The average amount due each member is $507.75, as against $495.80, the amount shown last year.

DENBY ORATOR FOR DEDICATION

Secretary of the Navy Denby will make the principal address at the dedication of the new memorial fountain, erected in memory of Admiral Dupont, one ofthe naval heroes of the civil war, Tuesday afternoon in Dupont circle. This fountain of pure white marble is considered to be one of the handsomest of its kind in the country. It replaces the bronze statue of Admiral Dupont, which will be sent to Wilmington.

Secretary of War Weeks will accept the fountain on behalf of the War Department. Rear Admiral Harrington, U. S. N. retired, who served on the staff of Admiral Dupont, will preside. He is more than eighty years old.

Colored Woman Stabs Another During Fight

Inez Hawkins, colored, 17 years old, 917 First street southeast, was stabbed in the left side of the breast by Ruth Day, colored, 18 years old, 115 M street southeast, shortly before 6 o'clock last evening, during an altercation on the New Jersey avenue bridge, southeast, according to the report received by the police of the Fifth precinct.

The injured girl was treated at the Casualty Hospital and later removed to the Freedmen's Hospital. The Day girl was arrested by the police of the Fifth precinct.

LICENSED TO WED DIPLOMAT

MRS. DOROTHY W. M'COMBS,

A marriage license was issued yesterday at the court house to Mrs. Dorothy Williams McCombs, former wife of the late William F. McCombs, chairman of the Democratic National Committee during the first campaign of Wilson, and Frederick Augustus Sterling, counselor of the American Embassy at Paris. The ages of the two are given in the license as 31 for the bride and 44 for the groom. The date of the wedding is reported to be set for May 21. The Rev. Father Edward L. Buckey, of St. Matthew's Church, will officiate.

Mrs. McCombs is the daughter of Mrs. John R. Williams and a sister of Mrs. Joseph Leiter, wife of the Chicago and Washington millionaire. Another sister is Mrs. John Ballantine Pitney, of Morristown, N. J.

NETHERLANDS LETS CONTRACT FOR NEW LEGATION BUILDING

Beautiful Structure Is to Stand at Fifteenth and Euclid Streets.

W. H. de Beaufort, charge d'affaires of the Netherlands government, this week signed the contract for the erection of a Netherlands Legation, to be located on the southeast corner of Fifteenth and Euclid streets. The plot is 125 by 150 feet and overlooking the beautiful Meridian Hill Park. In fact, the ground upon which it will be erected is so high, that a view can be had there overlooking the entire city and far down the Potomac.

Adds to Quartier.

This location is even more desirable than that of Sixteenth street, as there is a slight change of direction of Euclid street at Fifteenth which places the building practically in the axis of Euclid street.

This legation will be another beautiful building added to this interesting "Quartier Diplomatique." There is now a high terrace on the property, the front portion of which will be cut away to admit of a driveway and the entrance to the building. On this floor will be the entrance hallway, main stairs and coat rooms. On the floor above will be the principal rooms, which will include the large central hall, large and small salon, dining-room, pantries and a large two-story ballroom with music gallery, which will open on a terrace and directly into the garden. The garden will be a great addition to the beauty of the house, and it will be directly accessible from the ballroom, which will form a delightful adjunct to the ballroom when receptions are held at the legation during warm weather. Above the main floor will be two stories of bedroooms.

A unique feature of the house is the location of the laundries and kitchen on the third floor. These will be made accessible to the pantries below by electric dumb waiters and an electric passenger elevator will also be installed in the house.

Seventh and D Streets N. W. — The HUB FURNITURE CO — Open 8 A. M.—Close at 6 P. M.

Liberal Credit at The Hub---The Master Key

That Opens Wide the Door of Opportunity and Enables You to Realize Those Long-Cherished Ambitions for a Better Furnished Home

A SET OF DISHES FREE

With Every Purchase Amounting to $100 or More---Cash or Credit

CONGOLEUM GOLD SEAL GUARANTEE

CONGOLEUM GOLD SEAL ART-RUGS

The success of our last big sale of Congoleum floor coverings prompted us to procure at an advantageous figure another carload shipment to sell at practically the same LOWER THAN MANUFACTURERS' PRICES.

9x12 Foot Art Squares $7.95
(No borders, Various Patterns)
(Slight Imperfections in Print).....

Gold Seal (Perfect)
9x6 Congoleum Rugs, Special at..... $8.75

Gold Seal (Perfect)
9x7 ft. 6 in. Congoleum Rugs, in artistic rug patterns, special $9.45

10 ft. 6 in. by 9 ft.
Congoleum Rugs
$16.60

'Clarinola' Phonographs

We Guarantee the Motor For Five Years

Buy one of these beautiful Mahogany Phonographs for that nook in your home. You cannot buy any more phonograph value, even if you paid $100.00 Full size, 44 inches high, 18 inches deep by 18 inches wide. Universal tone arm and reproducer. Will play any standard make of disc record.

$79.75

Pathe Records for June

Instrumental

No. 20504—Size 10—Price, 85c
Humoresque (Dvorak) Violin Solo, Virgilio Ranzato, Concert Master, Toscanini's La Scala Orchestra.
Menuet No. 13 (Mozart) Violin Solo, Virgilio Ranzato, Concert Master, Toscanini's La Scala Orchestra.
No. 20303—Size 10—Price 85c
The Picadore March (Sousa), American Regimental Band.
The Gladiator March (Sousa), American Regimental Band.

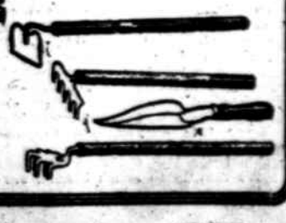
Vocal Selections

Pathe 20505—Size 10—Price, 85c—Actuelle 020505
Pining (Kendis-Brockman-Russell) Ernest Hare, Baritone.
Mammy's Little Sunny Honey Boy (Caddigan-Story), Crescent Trio.
Pathe 20316—Size 10—Price, 85c—Actuelle 020510
Wandering Home (Case-Stevens), Tenor Duet, Lewis James and Charles Hart.
Orange Blossoms (Plantadosi-Glogau-Green), Carlton Williams, Tenor.

A New Dance Record

Pathe 20514—Size 10—Price, 85c—Actuelle 020514
Spread Yo' Staff (Levy) Fox Trot, Lanin's Roseland Orchestra.
Hawaiian Blues (Metzan) Fox Trot, Green Brothers' Novelty Band.

Lawn Bench
Folding Hardwood Lawn Bench, finished in red and green; special
$1.49

THE STORE THAT SAVES YOU MONEY
THE GREATER HUB FURNITURE CO.
SEVENTH & D STREETS

This Garden Set
Rake, Weeder, Trowel and Hoe, as shown, only... 25c