FINANCIAL

LUKENS STEEL COMPANY
First Mortgage and Deed of Trust Dated November 1, 1920

Bankers Trust Company as Trustee under the above mortgage gives notice that it will receive at its Corporate Trust Department, No. 16 Wall Street, New York City, up to 3 o'clock P. M., on June 8, 1922 sealed proposals for the sale to it for the Sinking Fund at a price not exceeding 107¼% and accrued interest of sufficient 1st Mortgage...

OUTSIDERS COMING INTO CURB MARKET

List Shows Strength and Further Evidence of Accumulation—Daniels Motor Strong

New York, May 16.—There was a further display of strength and activity on the Curb today, trading indicating a substantial increase in outside demand. At the same time, there was evidence of accumulation of many stocks by interests already heavy holders.

Trading in the new Interborough issues, to be issued under reorganization, demanded special attention. The 6 per cent bonds, which opened yesterday at 71, made a further advance to 78 and the Interborough stock sold at 97⅞. This issue is to be limited to 7 per cent dividends under the readjustment plan. The voting trust certificates, representing the stock in the present shape, were traded in at 20½ to 31.

Daniels Motor was one of the strongest of the industrials, advancing to the new high record of 12¼. The buying was partly based on the official statement showing cash on hand of $380,000 on January 31 and total current assets of $1,177,601, against liabilities of only $229,000.

INDUSTRIALS

BONDS

3000 Texas Co 7s	101⅝	101⅝	101⅝
3000 Tidal Osage 7s	103	103	103
2000 Tol Edison 7s	106	106	106
5000 Un Oil of Cal 6s	101	101	101
24000 Un Oi P 8s	108⅛	108	108
1000 Valvorine 7s	100¼	100	100¼
8000 Un Ry Hav 7½s	105	105	105
26000 Vacuum Oil 7s	107	106⅞	107
2000 War Sug 7s	99⅜	99¼	99⅜
10000 West Elec 7s	108	108	108
2000 Winchester 7½s	101⅝	101⅝	101⅝
5000 Argentine 7s	99⅞	99⅞	99⅞
10000 City Elberfeld 5s	5½	5½	5½
10000 U S Brazil	98	97⅞	97⅞
1000 Swiss 5½s	102½	102½	102½
22000 U S Mex 4s	47	46½	46½

WIEDFELDT AT EMBASSY

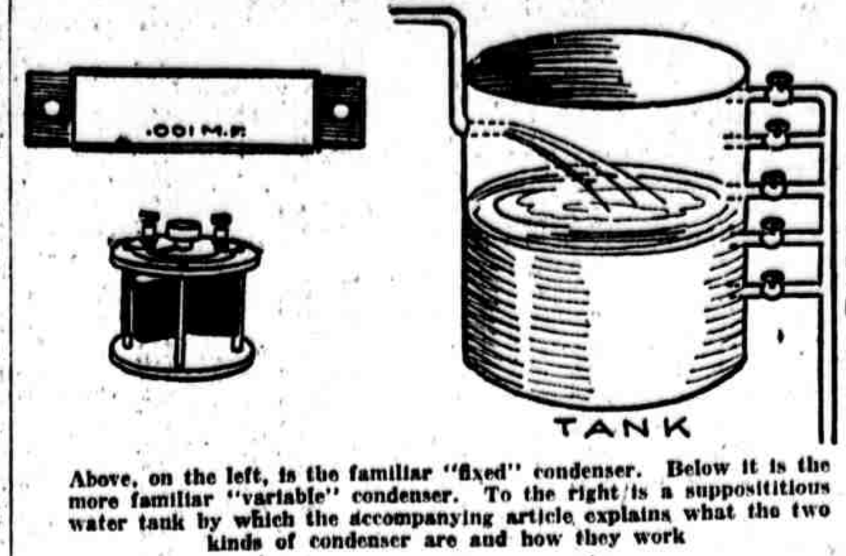
First German Envoy Since Von Bernstorff Reaches Washington

Washington, May 16.—(By A. P.)—The German Embassy housed a German Ambassador today for the first time since midnight February 13, 1917, when Count von eBrnstorff with the passports which had been handed him by the State Department left Washington to sail for home.

Dr. Otto Wiedfeldt, the new Ambassador, arrived at the Embassy late last night, having come to Washington from New York, where he landed last Saturday.

RADIO IN THE HOME

By HENRY M. NEELY



Above, on the left, is the familiar "fixed" condenser. Below it is the more familiar "variable" condenser. To the right is a suppositious water tank by which the accompanying article explains what the two kinds of condenser are and how they work

What Is a "Condenser"?

Your bathtub is a condenser. The kitchen sink is a condenser. The Shoshone Dam and the great dams on the River Nile are condensers. Your bank account is a condenser—a variable condenser—probably exceedingly variable. And the farmer's barn is a condenser.

Anything is a condenser that is used to store something up in until we need it. Your bathtub stores up water. In radio, a condenser stores up energy than we can turn into electric current when we want to use it.

But there's one very important difference to be borne in mind. While the condenser does store up this energy, it will not hold it indefinitely. It stores and discharges and stores and discharges with almost inconceivable rapidity, working up as fast as some three million times a second. But that's what we want in radio, so, for practical purposes, we can say that it stores the energy until we desire to use it.

If we could speak of this energy in terms of pints and quarts and gallons, it would sound a lot simpler, but if you can get into the habit of thinking that these electrical names are simply words to express much the same idea, they will not confuse you so much.

Suppose we have a supply tank at the top of the house. The man who installs your plumbing system will figure out how much water you will need and will install, let's say, a 500-gallon tank. At the top, there will be a drain pipe so that, when the water reaches this level, it will overflow. That tank will hold just 500 gallons and no more, because, as soon as that limit is reached, the excess water runs out through this drain pipe.

So we, in building radio instruments, have mathematical formulas which tell us just how big a condenser we need in each place in the circuit and we know how to build a condenser that will give us just 500 gallons of the energy we want and will overflow as soon as that limit is reached. Only, in radio, it is this overflow that we use to do the work. And, unfortunately, we don't say "gallons"; we say "MICROFARADS."

And another very important thing to remember is that a condenser in radio doesn't simply let the excess energy flow out. As soon as the limit is reached, the whole thing empties at once, sending quite a powerful electrical current rushing through the wires.

If you can imagine your house tank rigged up in such a way that, when the first drop of water flowed through the drain pipe, it loosened a trigger which let the whole bottom of the tank drop out, you would have a better illustration of an electrical condenser.

Now, suppose you had some sort of system which operated by the force of this sudden discharge of water. The supply pipe would keep on running and every time the supply reached 500 gallons, the bottom would drop, the water would exhaust and the bottom close up again ready to fill once more. This would operate only on a 500 gallon supply. There would be no variation in it.

Then it would be what we call a "fixed condenser." Your phone condenser is fixed. Your grid condenser is fixed. Sometimes with certain hook-ups you have fixed condensers in other parts of the circuits. They operate when the energy stored in them reaches a certain pre-determined amount.

But we also have "variable condensers," which are of great importance in "tuning" to get a signal sharp and clear and loud. Let us see what they do.

Go back to the illustration of the tank. Suppose we had various kinds of machinery to operate on various amounts of water. Then we would put in a number of drain pipes, each operated by a spigot so that we could open any one we wanted to. We might want them in "steps" of 100 gallons each. If we opened the top one, it would operate the trigger when the supply reached the original 500 gallons. If we opened the next lower one, the bottom would drop out of the tank when we had 400 gallons in it. The next would give us a 300-gallon operation and the next a 200 and so on. That would be a "step variable" condenser—one operating on various set amounts but not operating on any amounts in between.

The condensers which you buy—the twenty-three-plate and the forty-three-plate operated by a knob—are "continuously variable." Suppose, instead of having the spigot arrangement on your tank, the release or drain pipe came right up through the bottom and that we could raise it or lower it any amount we wanted to. The tank would empty as soon as the level of the water reached the top of the drain pipe.

But we can raise or lower the drain pipe with a continuous motion by this arrangement and so we can run the machinery on 500 gallons, or 435 gallons, or twenty-three gallons, three quarts, one pint and a gill and a half or any other amount we choose.

That, then, is a continuously variable condenser such as you all want. And the wise amateur who is experimenting with his own set will make a special sacrifice and buy two of them, for they are mighty handy things to have and save a lot of coil "tapping" when he wants to try a new hook-up that some one tells him about.

Today's Programs

Philadelphia Station (WIP)
(Gimbel Brothers)

1:50—Selections by the Gimbel Orchestra, piano, Raymond Steen; violin, Jacob Uhl; cello, George D'Annunzio; saxaphone, Vincent Guisine.

2:30—Short recital by Leo Sheehan, tenor, assisted by Charles S. Halsall, pianist.

3:00—Piano recital.

7:05—Final baseball scores.

7:15—"Uncle Wip's" bedtime stories.

7:20—"Uncle Wip" will read the names of children writing to him.

7:25—Special demonstration for Boy Scouts of Philadelphia.

8:00—Recital by the Aeolian Glee Club.

Philadelphia Station (WFI)
(Strawbridge & Clothier)

3:30 to 4:30 P. M.—Recital by the Strawbridge & Clothier Male Quartet — John Owens, Ednyfed Lewis, Harold Simonds and John Vandersloot—assisted by Anna Deasgo, soprano, and Mabel Fogg, pianist.

5:30 to 6 P. M.—Baseball scores.

Newark, N. J., Station (WJZ)
(Westinghouse)

7 P. M.—"Man in the Moon" stories (c) Newark Sunday Call.

7:30—Madame Petrova, famous actress, author of the play "The White Peacock," will sing, recite and talk to the invisible audience. She will tell about her stage and motion-picture experiences and probably tell about the love story of old Spain which she has woven into her play, the "White Peacock." Mme. Petrova will soon begin a world-wide tour.

7:50—"Children's Stories," by Podraic Colum, courtesy McMillian Co.

8—"The Eyes of the World," by Winifred Hathaway, Brooklyn Chapter of American Red Cross Society.

8:10—"Broadcasting Broadway," by Bertha Brainard.

8:20—"Personal Hygiene," by Dr. Donald B. Armstrong, of the National Tuberculosis Association.

8:30—Concert by the Standard Oil Band of New Jersey, Charles Biedman, director.

9:30—Concert by the Police Octette of Newark; Sidney A. Baldwin, director. Program—"1921 Medley," Remick; "About Clock," Hammond; "A Perfect Day," Bond; "The Wise Old Owl," Nevin; "My Isle of Golden Dreams," Blaufuss; "Sunset," Van de Water; "Medley From the South," Pike; "Should Auld Acquaintance Be Forgot," Bostford.

Pittsburgh Station (KDKA)
(Westinghouse)

3:30 P. M. and at fifteen-minute intervals thereafter, baseball scores.

7 P. M.—Baseball scores; news, weekly dress talk.

7:15 P. M.—Concert by the Tri-Artist Orchestra, William Savage manager.

7:45 P. M.—Government market reports and a report of the New York Stock Exchange.

8 P. M.—Baseball scores; "Nursing," by Mrs. Ford, of the Pittsburgh Public Health Nursing Association, Pittsburgh.

8:30 P. M.—"Peter Rabbit," a bedtime story.

9 P. M.—Music.

10 P. M.—Baseball scores; election returns. Music program.

Schenectady Station (WGY)

1:30 P. M.—Early stock market quotations.

7 P. M.—Produce and stock market quotations; baseball results; news bulletins.

8:45 P. M.—Concert program.

POPE TO SEE BASEBALL

Pius Will Be First Pontiff to See Game

New York, May 16.—A Pope for the first time is to witness a baseball game soon.

In donating to the Knights of Columbus a site for an athletic field at the foot of one of the seven hills of Rome, Pope Pius, it was announced here yesterday, expressed to Edward L. Hearn, director of the organization's work in Italy, the hope of seeing the American game played.

Pope Pius will be able to watch the game from a window of his study overlooking the field. "I want to see with my own eyes the development of your work," His Holiness said when the project of the Knights for expending $1,000,000 for welfare work in Italy was explained to him. The Pope emphasized the need of athletics for the youth of Italy.

Admits Robbing Store

Horace Johnson, a Negro boy, Lombard street near Eighth, was arrested today on a charge of robbing the store of Benjamin Shapiro, 503 South Ninth street. Detective Anderson says Johnson confessed taking cigars and tobacco valued at $10.

MAN BLOWN TO CEILING

Meets Death Sitting on Alcohol Keg Which Explodes

Norfolk, Va., May 16.—(By A. P.)—When a keg of grain alcohol, on which he was sitting while reading a newspaper in a Portsmouth drug store, exploded last night and hit the ceiling, James Parker, Negro, was instantly killed.

He was blown to the ceiling and then hit a stovepipe before falling to the floor.

Doctors who examined him found he had a broken neck. The keg was undamaged except that the bottom was blown out.

MARRIED

FELIN—KING.—Mr. and Mrs. L. Stanley King, of Cynwyd road, Cynwyd, announce the marriage of their daughter CLARISSE, to Mr. HAROLD E. FELIN, son of Mr. and Mrs. Charles F. Felin, of Germantown, on Saturday, May 13, 1922.

IN MEMORIAM

BENCKERT.—In loving memory of my beloved wife, JULIA E. WATKINS BENCKERT, who departed this life May 16, 1919.
HUSBAND.

HOPE.—In memory of ROSA, a loving and devoted sister. May 16, 1915.

Deaths

ALBERT.—On May 14, 1922, GUSTAVUS A. ALBERT, husband of late Mary C. Albert, aged 67 years. Relatives and friends, also Wash. Camp 361, P. O. S. of A.; Phila. Com'dy No. 2, Phagoras Lodge 129, K. of P.; Public School Janitors' Asso. invited to funeral services on Thursday, at 2:30, at daughter's residence, Mrs. Mary Kiltch, 3812 Aspen st. Int. private, American Mechanics Cemetery. Friends may call Wed. eve.

ASH.—May 14, 1922, ESTHER SYBIL, widow of Norman C. Ash, aged 82. Relatives and friends are invited to attend the funeral...