



Conference Telephones

The development of special diminutive-sized loud speaker apparatus by the Bell Telephone Laboratories enables groups of people widely separated to be united by what is known as a conference telephone service. This service, described by J. F. D. Hoge, telephone laboratories engineer, enables a telephone conversation to be held simultaneously with several people at one or both ends of a telephone line.

The equipment consists of a small compact loud speaker set, which is housed in a wooden cabinet. The total weight is approximately eleven pounds, but it has sufficient sound output to serve a group of from 75 to 100 people under favorable room conditions.

Two forms of service are available, according to Mr. Hoge in the Bell Laboratories Record. In one, the telephone line may be connected to either the telephone set or the loud speaker. This service is more applicable where an address of some length is to be received over the telephone line during which time it is not desired to use the line for talking in the other direction. This loud speaker set and associated apparatus may be installed on a permanent basis or for temporary use as occasion demands. Another connection may be established so that two-way conversations can be held just as in everyday telephone calls.

Conference telephone service with the use of loud speakers has a particular appeal to business executives who wish to speak directly without change or emphasis with groups of people. Employees, for example, may hear the executive's voice directly as though he were speaking to them personally. In this way his personality and enthusiasm come to them just as if he were in the same room. This type of loud speaker was developed in 1933, and is now widely used, according to telephone officials.

FACTS AND FIGURES ON YOUR TELEPHONE BY Elmer Hill



Telephone calls have increased 7 per cent in Maryland, Virginia, West Virginia and the District of Columbia in the past year. Officials of the Chesapeake and Potomac Telephone Company report 3,500,000 originating calls are now being made each twenty-four hours. In Maryland there are 917,000 daily calls, Virginia 1,112,000, West Virginia 625,000 and the District of Columbia 855,000 calls. Service improvements include more calls being completed on the first attempt of the operator to reach the subscriber and a substantial decrease in operating errors.

Quicker Service
During the past year more than 83 per cent of all local Bell System telephone calls in the United States were answered on the first attempt of the operator as compared with about 81 per cent in 1929. Telephones reported busy or not answered accounted for nearly all of the calls not completed immediately. In the six years—1929 to 1935 inclusive—operating errors on local calls throughout the country were decreased 40 per cent. On long distance calls the average time required for completion of connections was reduced from slightly less than 3 to 1 1/2 minutes and all but 8 per cent of such calls were handled while the person calling remained at the telephone as compared with 29 per cent in 1929. As a result of these and other betterments, 750,000,000 telephone calls or about three per cent of the total calls made throughout the country last year were handled with much more satisfaction to telephone users than would have been the case six years previously.

Fewer Troubles
Improvements were not limited to the service for 95 out of every 100 telephones were installed last year under the practice of arranging with the customer to place the telephone at a definite time agreed on as compared with 57 out of every 100 telephones six years ago. Records show that subscribers' lines and telephones were in service without interference an average of 23 1/2 months as compared with 20 months. The percentage of troubles cleared on the day reported was increased during the year from 87 to 96 per cent.

In life, it is just as important to forget some things as it is to remember others—and keep right on keeping on.

Be careful about inheriting a fortune. A man did it the other day and dropped dead.

THE GATES OF TIME

EVANGELIST JOHN MOSES BAKER
Baltimore, Maryland

When the gates of time swing behind us,
And our labor on earth is all o'er,
What a joyful and happy meeting
On Canan's bright, golden shore.

When the gates of time swing behind us,
If we have been faithful and true
In our labor of love for the Master,
The work that He gives us to do.

Soon the toiling time will be over,
How short after all is life's day;
And the gates of time swing behind us;
We have gone every step of the way.

I believe when life's journey is ended,
If we only keep to the task,
When the gates of time swing behind us,
This is all that the King shall ask.

Let God's hand be on the altar
Of your life, from day to day;
His presence will always be with you;
He will keep you forever and aye.

Telephony Continues Scientific Research Child • Dr. Jewett

Modern telephony, which enables all but about 7 per cent of the total estimated 35,000,000 telephones on the globe to be connected with any Bell System telephones, is the child of organized scientific research, according to Dr. Frank B. Jewett, vice president of the American Telephone and Telegraph Company, and president of the Bell Telephone Laboratories. Writing in the Bell Telephone Quarterly, Dr. Jewett thinks that scientific research is destined to continue in this status for many years to come. Without venturing, he says, on the unsafe ground of speculation as to what further research in fundamental science may produce, it is known by telephone scientists that there are still great vistas of possibility for scientific research in the field of telephony and its sister services.

News Dissemination
Scientific research has developed radio telephony so that ocean barriers to speech have been destroyed, and likewise communication made possible to and between ships, airplanes, and all moving vehicles. It has developed radio broadcast and initiated a great new industry in the realm of disseminating news, music, and entertainment. It has made possible the simultaneous transmission of a host of non-interfering messages over the simple circuit which before its advent carried but a single message and that but poorly. Finally, it has made possible the interconnection of all these services and in addition has given birth to a great new industry where sight and sound are joined for the edification and education of the public.

Bell Laboratories
Dr. Jewett says the Bell Telephone Laboratories has built up a great organization of scientifically trained men competent to contribute new knowledge of a fundamental character to attack expeditiously and efficiently any problem which presents itself and with a demonstrative capacity to produce results far exceeding the expenditure of time, effort and money required in their production. It is true, he says, as it has been for many years past that each advance in the art of telephony opens the way to yet other advances. How far it will be



This telephone, far-reaching in its connections, is simple in operation, so that children of tender age use it with ease. Witness Anne Roe telling Daddy that she is all ready for school.

commercially practical to go is something for the future to determine, but in the last analysis it is a problem for organized scientific research to which finally the cold impersonal judgment of economics is applied.

Distance No Barrier
Electrical communication, according to Dr. Jewett, has crossed many frontiers in the last few decades. It is true, he says, as in every other field that a frontier once crossed can never again be a frontier. Telephone scientists for whom the spanning of a continent or an ocean with speech channels was once a challenge have through their success closed the door forever to later generations. There is no barrier of distance to telephony anywhere on the globe where man may be. The establishment of telephone channels is purely a matter of economics or of policy.

Sixty-five Countries
Telephone communication is now possible between more than sixty-five countries and geographical locations on the six continents of the globe. Sixty years ago it was possible to talk only between two telephones connected by thirty feet of wire.

WISE ECONOMY IN FEEDING IS ADVICE TO DAIRY FARMERS

Feed is already high and probably will go higher, so this is a good time to cull the dairy herd, is the advice of John A. Conover, dairy specialist for the University of Maryland extension service. Good producers will pay for their feed, he states, but the poor ones will lose money for their owners.

Mr. Conover warns against trying to save money by half feeding dairy cows. More money will be made, he says, by disposing of the low producers and feeding the good cows to capacity.

Dairy farmers are advised to watch the feed market and buy the feed that will furnish the greatest amount of protein for the least money. This feed can be combined with home grown grains to make a mixture suitable for the herd.

On many farms there is a shortage of hay, according to Mr. Conover. In such cases, he states, a number of weeds can be made into hay and used to feed dry cows and young stock. He mentions also that a temporary silo can be built, using lath fencing and reinforced paper, which will provide storage for additional silage. Legume crops, if ensiled with from 50 to 70 pounds of molasses to the ton, will come out of the silo in splendid condition, and will help lower the feed bill, according to this specialist.

Suggestions for making up rations can be obtained from Circular No. 9, which may be had free of cost by writing to the Extension Service at College Park.

MIRACLE HOUSE CLOSES

The seventeenth season of the Miracle House at Claiborne was brought to a close September 2nd, when nearly a hundred tanned and healthy children returned to their homes after spending the summer on the Eastern Shore in a quest of health.

The Miracle House, a tuberculosis preventorium for Maryland children, has for the past few months been the host to 121 children from all over the state. These children are from homes that have been visited by tuberculosis and in most cases the children were greatly run down and malnourished. During the summer months at the Preventorium they hardened their little muscles and filled out their thin bodies. Every child responded well to the treatment, some gaining more than ten pounds. The largest gain made was fifteen pounds.

This past summer 49 children from the counties of the state attended the Miracle House. These children represented 11 counties.

The purpose of the Miracle House is to take these children who are susceptible to tuberculosis through their contact with the disease, and build up their resistances and strength so that they might overcome any future infections. This is accomplished by a regimen of play, rest and sleep in addition to a planned diet of health giving fruits, vegetables and meats.

The Miracle House is operated by the Maryland Tuberculosis Association and is supported by the annual sale of Tuberculosis Christmas Seals.

ORPHANS' COURT

Bonds Approved—Delaware Trust Company, executor of Walter A. Layfield; James F. Evans and Standley Evans, executors of John P. Evans; James F. Evans, administrator of Jennie Frazer Evans; Haason T. Terrell and J. Mercer Terrell, executors of John H. Terrell; Nastia Markovich, guardian of John Bilan and Charles Bilan.

Accounts Passed—First and final account of Annie Alexander, administratrix of James Alexander; first and final account of Perle Gillespie, administratrix of James E. H. Gillespie; second and final account of Lawrence R. Brown, executor of Augusta B. Krauss.

BANNER MONTH FOR CHEVROLET

Detroit, Mich., Sept. 10—August went into the records as another banner month for Chevrolet, according to an announcement made today at the company's offices here. Combined sales of cars and trucks were 95,905 units, the second-largest August figure in Chevrolet's history. Truck sales, reported at 23,249, were the highest ever made in August, and the second-highest ever made in any month.

An additional highlight of the dealers' sales performance in August was their sale of 165,197 used cars, nearly 20,000 units more than they sold in August 1935. Used car stocks nationally decreased 3,527 units in the last 10 days of the month, and as this month opened were more than 7500 units lower than at the same date last year.

If promises counted as votes every candidate would be elected.



LEARNING THINGS

Boys and girls usually find the hobby of learning things very interesting for the more information one has, especially on one certain subject, the better prepared he is to discuss that subject. Occasionally, school teachers find that students who learn quickly usually have a good hobby at home, which gives them freedom for direct thinking.

A few years ago Wilson Dillon spent his spare time learning the numbers of all the automobile license tags in Preston and vicinity and could give without hesitation the name of the car owner of any tag one might mention. Sounds simple but what is the license number on your own car? It is just a matter of concentration and retention. Incidentally, the students at the University of Cairo in Egypt memorize the entire Koran, which is the Mohammedan Bible, much the same as colonial American families held learning sessions around the fireside.

A lot of things are involved in the attitude of learning things. Among them are interest, natural curiosity, willingness, attention, action, the law of readiness and the ability to concentrate.

One's attitude toward learning things can be improved by reading, observing, doing things and listening. A number of radio programs have possibilities for creating interest in learning things. Several are the March of Time, Vox Pop and George Denny's Town Hall.

Of course, desire is a vital factor in any learning process which brings to memory the struggle of Lincoln, Wilson, Helen Keller, Holland B. Wilkinson, and numerous others. There are, no doubt, persons in your community whose desire for learning has meant a terrific struggle and sacrifice though now they are reaping the rewards.

Learning is not confined to reading books but may be obtained from experimenting and working on machines, problems in science, and the manipulation of the language to make it easy and interesting reading.

Most school students do not know how to study or reason out problems. Whipple's little book is one book that all students should read for ideas on how to study. It is better to overlearn than to underlearn. The principal key to learning things is asking questions. While there is no closed season on learning things as learning is a continuous process, the active season for institutional transfer of learning is opening up at this time.

Learn thoroughly—master the subject or machine—for retention and application are the tests of learning when these are thoroughly mixed with common horse sense.

Learning things will be easy if learning things is your hobby.

Books: How to Study Effectively—Whipple; The Art of Learning—Pitkin.

Next Week: Golf.

CHRISTIAN SCIENCE SERVICES

"Matter" will be the subject of the Lesson-Sermon in all Churches of Christ, Scientist, on Sunday, Sept. 20. The Golden Text will be from John 3:6—"That which is born of the flesh is flesh; and that which is born of the Spirit is spirit."

Among the citations comprising the Lesson-Sermon will be the following from the Bible—Isa. 55:1—"Ho, everyone that thirsteth, come ye to the waters, and he that hath no money; come ye, buy, and eat; yea, come, buy wine and milk without money and without price."

The Lesson-Sermon also will include the following passage from the Christian Science textbook, "Science and Health with Key to the Scriptures," by Mary Baker Eddy, page 286—"God's thoughts are perfect and eternal, are substance and life. Material and temporal thoughts are human, involving error, and since God, Spirit, is the only cause, they lack a divine cause. The temporal and material are not then creations of Spirit. They are but counterfeits of the spiritual and eternal."

Loss from forest fires in Maryland was much less in 1935 than during previous years. This was due in large part to use of the C. C. C. boys in controlling fires.

30 OR MORE COMICS

The big Comic Weekly which comes every Sunday with the BALTIMORE AMERICAN now contains 30—or more—of the world's greatest comics; all printed in bright colors. If you want the best comics read the BALTIMORE SUNDAY AMERICAN. Get your copy from your local newsstand.

YOUR STARS AND NUMBERS

by JOHN RANDS
Astro-Numerologist

The planet Mercury turns retrograde September 18th, so use care in signing papers and be watchful of your correspondence till October 9th. This applies to you particularly if you were born between September 23rd and October 10th. The 17th (September) may bring some sensational news. Watch the Press September 17th and 18th. Till noon of 20th avoid over-optimism, excess of all kinds. Health, credit and finances, banking and bankers all stressed due to the Quadrature of Jupiter and Neptune which culminates the morning of Sept. 20th. The planet Jupiter rules Finances and has considerable influence over Capital, while the planet Neptune rules Ideals, especially (during Neptune's transit through the Zodiacal Sign Virgo) Ideals as applied to Labor, Service, Employment and Health. This "square" aspect between Jupiter and Neptune has been in effect since August 11th. It strongly affects the Political Issues of the times. On the morning of Sept. 23rd the Sun enters the Sign Libra and Autumn begins. A change in the mental outlook of the People will take place. Socialistic tendencies will increase. Attention is drawn to the Pyramid prophecies which point to September 16, 1936, as the date for a change of Era. This may not be noticeable at first, but will be very discernible within a very few years. The period September 18th-24th, this year, will be one of intense activity and effort. A gigantic struggle between opposing forces will occur this month.

Sept. 18: Avoid the sudden, especially if partners are involved. Careful with the new. The No. 4, with the letters D-M-V, stressed unfavorably today.

Sept. 19: Deceptive—be careful. Self-control needed. Watch your emotions. No. 5, with the letters E-N-W, accentuated.

Sept. 20: Romantic affairs favored. Hold temper; avoid rashness; the day as a whole vibrates to the No. 6, with the letters F-O-X.

Sept. 21: Expansive. Seek to establish harmonious relations with others. No. 7 rules. Corresponding letters are: G-P-Y.

Sept. 22: Delusion complicity, treachery could easily gain control today unless watchfulness and self-control be exercised all day. Guard health and credit. The No. 8 is unfavorably accented today. The corresponding letters are: H-Q-Z.

Sept. 23: Accept delays. Careful in occupation and with superiors. Finances need watching. The Cycle Number is 1, with the corresponding letters A-J-S. The secondary of these will be prominent in the events of the day also. These secondary vibrations are: 4, with D-M-V.

Sept. 24: Do not put too much trust in communications, news, dispatches, received today. The emotional and romantic favored. The No. 2, with letters B-K-T, stressed in today's events and activities.

Those whose birthday occurs between Sept. 7-14, incl., are under exceptional planetary stress at this time. Tension, strain, confusion, both from within and without, assail those born at during and between the two dates given. The health needs care. Partnership and matrimonial affairs may be in anything but a favorable way. But this period of strain and stress will soon be over. Better times are at hand. Be patient, careful, co-operative and self-controlled during this last mile of the journey.

CIVIL SERVICE EXAMINATIONS

The U. S. Civil Service Commission has announced examinations to fill the following positions:

Department of Agriculture, Soil Conservation Service: Senior Agricultural Aid, \$2,000 a year; Agricultural Aid, \$1,800 a year; Assistant Agricultural Aid, \$1,620 a year; Junior Agricultural Aid, \$1,440 a year; Under Agricultural Aid, \$1,260 a year. Applications to be filed by September 21.

Department of the Interior, Bureau of Indian Affairs: Director of Education, \$6,500 a year. Applications to be filed by September 21.

Additional information concerning these examinations or others may be obtained from the Secretary, Board of U. S. Civil Service Examiners, post office or custom house in any city, or from the U. S. Civil Service Commission, Washington, D. C.

Home demonstration work was carried on under the Extension Service of the University of Maryland in 576 communities last year; 7,821 demonstrations and meetings were held, with a total attendance of 273,622. There are 295 homemakers' clubs, with an enrollment of 8,543; 43 project groups, with an enrollment of 726; and 235 4-H clubs, with an enrollment of 4,240.