1-1-1924

Virginia Teacher, January 1924

State Normal School for Women at Harrisonburg (Harrisonburg, Va.)

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Recommended Citation
Virginia Teacher, January, 1924, V, 1, Harrisonburg, (Va.): State Normal School for Women at Harrisonburg.
THE VIRGINIA TEACHER

January, 1924

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An illustrated exposition of the principles of radio reception
By William Byrd Harrison, of Miller School, Albemarle County
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VirGINIA TEACHER

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JANUARY-DECEMBER, 1924

JAMES C. JOHNSTON AND CONRAD T. LOGAN, EDITORS
HENRY A. CONVERSE, BUSINESS MANAGER
CLYDE P. SHORTS, CIRCULATION MANAGER

PUBLISHED AT
THE STATE TEACHERS COLLEGE
HARRISONBURG
VIRGINIA
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BOSTON
THE RADIO-TELEPHONE

A GOOD teacher uses the problems of today in which boys and girls are universally interested as a means of teaching those general principles which are so apt to prove irksome if studied abstractly. For the teaching of elementary electricity the radio telephone is most admirably suited, since while it furnishes endless entertainment, it also inspires a desire to see how and why the wheels go round. In order to accomplish this the student must necessarily learn something of the underlying principles of elementary electricity. Unfortunately, however, many teachers of science cannot use this project that has been made to order because they themselves do not understand the principles involved. It is therefore the purpose of this article to set forth, in as simple and non-technical language as possible, the principles that underlie radio reception.

The mechanism of the broadcasting station sends an alternating current into its antenna that cause a wave motion in the surrounding space, or ether. A direct current, such as that produced by an automobile storage battery, always flows in one direction, but an alternating current, such as is found in most city lighting systems and high power transmission lines, does not. An alternating current flows first in one direction, then in the other—continually reversing at a regular rate. The number of these complete reversals of flow which take place each second is spoken of as the frequency, and is expressed in cycles a second.

Waves set up in the ether by a broadcasting station can be compared to the waves set up by a stone that has been dropped into a pond of water. The number of waves that appear to pass a given point in a second is called the frequency of the wave formation. The distance from the top of one wave to the top of the next in called the wave length. The height of the wave crest above or the depth of the trough below the still water level is called the amplitude. That is, the amplitude is half the distance from the wave crest to the bottom of the trough when measured vertically in the case of the water wave. It should be noticed that wave length and frequency remain constant as the wave moves on, while the amplitude constantly diminishes as the distance from the point of origin increases. In example, most lighting systems use a frequency of sixty cycles a second; most power systems, twenty-five cycles; while radiophone transmitters use frequencies as high as 1,000,000 cycles (1000 kilocycles). Now, radio waves travel with the speed of light (300,000,000 meters a second). Therefore to find a given wave length we divide 300,000,000 by the frequency and vice versa. For instance, to say that a station uses a 400 meter wave length is the same thing as to say that its frequency is 750,000 cycles (750 kilocycles). Incidentally sound waves in air travel at only 330 meters a second, or only a little more than one-millionth as fast as radio waves.

The question naturally arises as to why the sound waves are not outdistanced by the radio waves. They are not because they ride on the radio waves, or rather electrical waves with the same characteristics as the sound waves are made to ride on the radio waves. The sending set puts them on and the receiving set knocks them off and converts them back into sound waves.

Figure 1 shows an unmodulated wave

with frequency too high to be audible to the ear, which cannot respond to such rapid vibration. Such waves may vary in frequency
from 10,000 to 3,000,000 cycles a second. Hence frequencies between these limits are classed as radio frequencies.

Figure 2 shows an audible sound wave which may vary in frequency between the limits of 16 and 10,000 cycles a second, and such frequencies are classed as audio-frequencies, because the average ear is deaf to frequencies above and below these limits. The vibrations of the human voice seldom go above 1,044 or below 65 per second.

Figure 3 shows a modulated wave—one with a sound wave impressed or super-impressed on it. Space does not allow much detail as to how this is accomplished. Suffice it to say that the vibrations produced by the voice or musical instrument are applied to the diaphragm of the transmitter, causing it in turn to vibrate. These vibrations cause a corresponding fluctuation in the electrical currents in the sending set that varies the amplitude of the radio waves to correspond to the audio wave.

The radio wave shown in Figure 3, although modulated, is not suited for reception in the telephones, as the pulls in opposite directions, as represented above and below the line AB, are of so great a frequency as to paralyze the receiver diaphragm. They must be rectified after being picked up by the receiving set before being passed on to the telephones so that the pulls are on one side of the line AB as in Figure 4. With the crystal detectors, this is accomplished through the peculiar properties of some crystals, such as galena, that allow a current to flow through them more easily in one direction than in the other. Crystal sets can not be depended upon to receive regularly more than 15 to 50 miles from a broadcasting station. For greater distance a set equipped with one or more vacuum tubes is required. Before proceeding to such a set it is advisable to consider a few fundamental principles, the understanding of which is essential to the most satisfactory operation of a set, and even more so to the proper design of receiving apparatus.

The radio waves sent out by the transmitting station, strike the antenna of the receiving set and set up currents in it which oscillate with the same frequency as that of the waves causing them. If this antenna be connected with the elements of a receiving set in such a way that all or part of the energy of these currents is transferred to it, they may be made to produce the original sounds by means of suitable apparatus. We might use a circuit such as shown in Figure 5 with any good rectifier, either tube or crystal, as previously mentioned. Although this simple arrangement would produce sounds in the telephones, it would receive any type of electrical disturbance that happened to strike the antenna, and what with atmospheric electricity (static) and waves from all sorts of wireless sending stations, both telegraph and telephones, the sound in the receiver would be a bedlam. If we are to receive the particular wave we desire and choke out the others we must add to our simple set some means for tuning, i.e. choking out or by-passing the undesired currents and turning into our rectifier only those currents which we want into our phones. Such an ideal cannot be completely realized in practice, but the better receivers can so nearly approach it that the stray currents which enter the phones are generally so weak that they produce either inaudible sounds or sounds so faint as not to be objectionable when the sets are properly tuned. There are three characteristics of every electrical circuit which tend to control an alternating current flowing through it:
resistance (electrical friction), reactance due to capacity, and reactance due to inductance. Resistance is the only one which effects a steady direct current, but for very high fre-

![Diagram](image)

quency alternating currents or pulsating currents flowing in one direction, the last two are of paramount importance. Inductive reactance is to electricity what inertia is to matter in motion. Capacitive reactance may be compared with elasticity. By using both in a receiving set we may not only choke out the undesired currents but may greatly increase the desired ones, provided either capacity or inductance, or both, can be varied to produce resonance with the wave of the particular frequency which is wanted. A mechanical analogy will help to make clear the meaning of resonance and the application of it to the selection of desired radio waves. It is important to remember at this point that each sending station puts out a wave with a definite and unchanging frequency and a frequency that is different from those of other stations. Suppose a weight is hung on the end of a coil spring, pulled down and then released. It will be seen that it vibrates up and down with a perfectly regular frequency. Friction, how-

![Diagram](image)

ever, will finally bring it to rest. But, if even a broom straw is placed in contact with the weight and moved up and down with exactly the same frequency with which the weight was vibrating, it may not only be kept in motion, but the amplitude of the vibrations may actually be increased. Now with the weight at rest try to move it up and down with the broom straw, but apply the impulses either irregularly or at a different frequency from what you did before. The movement of the weight will be so slight as to be almost imperceptible. Next hang a heavier weight on the same spring or increase the length of the spring and repeat the experiment. The weight will vibrate again at a regular rate, but more slowly than before. If either weight or length of spring be decreased it will vibrate faster than before, but no matter what the combination be, each will be most affected by impulses applied at the natural frequency of that particular combination of weight and spring, and very little affected by impulses at any other frequency. When the length of spring or mass of the weight is varied until the period of the combination is the same as that of the applied impulses, it vibrates most strongly and is said to be in a state of resonance with these impulses.

So by using condensers which possess electrical elasticity (capacity) and inductance coils or inductances which possess electrical inertia and which correspond with the weight in the above experiment, if we make either or both capable of being varied we can tune our set to resonance with the weak little alternating currents which we want to pick up and make them cause much larger currents to swing back and forth through our set, at the same time choking back those of undesired frequency and thus prevent them from causing any appreciable effect in our phones. A coil of wire, due to its inductance, tends to prevent any sudden change of current through it (it possesses electrical inertia) and the greater the number of turns the greater this effect is.

The condenser allows electricity to be pulled up on its plates, though it possesses electric elasticity (capacity) which tends to make the electricity flow back again, just as the spring tends to pull the weight back when it is pulled down; but the larger the condens-
er the greater the quantity of electricity (number of electrons) that can be piled up with a given force, hence the longer it takes for a given electrical force to pile it full or stretch it to the end of the stroke, just as the longer spring requires a longer time to stretch to the end of its stroke and begin to pull the weight back. Hence we see that if we increase the inductance of our coil by using more turns, or in any other way, or if we increase the effective size of our condenser, (in the rotary condenser, done by swinging the movable plate in between the stationary ones) we slow down the natural period of the combination, i.e. tune it to resonance with a lower frequency or, what is the same thing, make it respond to a greater wave length. In either case, whether it be inductance or capacity that is increased, a longer time is required for the completion of a cycle and consequently the fewer the number that can be completed in a second of time; or the greater the wave length to which the set will respond, since the product of a wave length and frequency is always equal to the velocity 300,000,000 meters a second.

Now for the application of these principles to the receiving set. In the set to be described all tuning is done by the variable condensers. The coils have a definite number of turns (say 25 to 100 for broadcast reception, more for commercial and government telegraph waves) and hence their inductance is fixed, but we must remember that we may bring our circuits to resonance by adjusting either inductance or capacity and that in this case we are going to tune by changing the capacity. In connection with the following refer to Figure 6.

The antenna (A) receives the radio waves which set up currents in it, that flow through L-1, a coil of wire, wound either on a cylinder of cardboard, etc., or made up as a honey-comb coil or other suitable type. This coil is necessary for the purpose of adding inductance to the antenna circuit. The antenna possesses some inductance as well as some capacity, but additional inductance and capacity is necessary for tuning, as has been explained above.

L-2 is a second coil placed close to L-1, but not connected directly to it, and is known as the Secondary coil. When two coils are so placed a variable or an alternating current through one will cause, or tend to cause, an alternating current to flow through the other, especially if their axes are in the same straight line. This is the principle of all transformers, although those for low frequencies are built with iron cores while those for radio frequencies are made with air cores or are wound on some non-magnetic material.

VC-1 is a variable condenser used to tune...
the antenna circuit. VC-2 is another for tuning the secondary circuit, which includes the coil L-2, the grid-condenser and terminates in the grid of the vacuum tube. T is a vacuum tube (in this case a detector tube). It was this tube, more than anything else, that made the broadcasting and reception of radio possible. Three elements are to be noticed in this tube. The first is the filament, which is a fine wire similar to the filaments in an electric light. When this filament is sufficiently heated (done by passing a current from a battery of dry cells or storage battery through it) the atoms of the filament are caused to vibrate violently and throw off a shower of electrons (particles of negative electricity). Surrounding the filament but not touching it is a flat or cylindrical plate of metal. This plate is connected directly or indirectly to the positive terminal of the battery, known as the B battery or plate battery, which gives the plate a positive potential with respect to the filament. The voltage of such a battery should range from 16½ to 22½ volts for a detector tube and from 40 to 120 or over for an amplifying tube. Now ordinarily the electrons shot out from the filament wander about aimlessly inside the tube. The introduction of the plate with its positive potential, however, causes an attraction for these stray electrons and makes them flow in a steady stream to the plate and through the plate circuit. The flow is constant as long as the filament temperature and plate voltage are constant, or rather the flow would be constant were it not for the grid or third element. The latter is no more than a sort of net work or helix of fine wire wound on supports around the filament and between it and the plate. Since it is closer to the filament than the plate is, a slight positive or negative charge on it has a big influence on the flow of electrons through it to the plate, and because of its small size, only a few of the electrons come to roost on the grid itself, but pass on to the plate. If the grid is positive with respect to the filament, more electrons pass on to the plate than normally; if negative, the electrons are repelled and very few get by to the plate. So that a slight fluctuation of potential on the grid will cause a comparatively large variation in the flow of electrons to the plate and through the plate circuit.

\[ \text{FIG. 6-A} \]

The extremely small current received by the antenna, passing through the primary coil L-1, induces a current in the secondary coil L-2. This induced current flows through the grid condenser to the grid of the detector tube, causing the grid to act like a gate or valve to control the comparatively larger flow of current from the filament to the plate and impresses its wave characteristics on the latter current.

Now it will be seen by reference to Figure 3 that the positive and negative impulses of the currents as received are about equal, and were it not for the rectifying properties of the detector tube, which suppresses either the positive or negative half of the oscillation (depending on which way it is connected), the two sets of impulses alternating so rapidly would just about neutralize each other and no sound would be heard in the phones.

Owing to the tendency of the electrons to collect on the grid it will become more and
more negative as long as impulses are applied to it, finally stopping the flow to the plate entirely, unless some means be provided for getting rid of this charge. This is accomplished by the grid leak (G. L.), a very high resistance shunted around the condenser. (The condenser is necessary to the easy passage of the high frequency currents which actuate the grid). The tube owes its rectifying properties largely to this grid leak. A complete explanation of how it does this is both long and complicated and will not be attempted here.

For a general statement it is sufficient to say that the main function of the grid leak is to allow the excess negative charge, which collects on it during each wave train, to leak off before the next one comes along.

Now referring again to the figure it will be noticed that any current in the plate circuit must flow through the B battery, the phones and the coil L-3. This is called the tickler coil and is placed near the secondary coil L-2, so that some of the energy in it is transferred to L-2 and fed back into the grid circuit. This action tends to further boost up the variation in the plate circuit, resulting in louder signals. This feedback action is known as regeneration. The amount of regeneration is controlled by the closeness of the tickler coil to L-2. In building or assembling a receiver it is possible that the tickler may be wrongly connected, in which case the signal strength is weakened instead of being built up. If so, a reversal of the connection to the tickler coil should remedy the trouble. The tickler must not be moved in too close to the coil L-2 (coupled too tightly, as it is called) or the tube will oscillate, giving the signals a mushy sound and making voice and music unintelligible. The form of the current wave in the plate circuit is shown in Figure 4, or like Figure 3 with half of the wave reduced or cut off. It will be seen that the little radio-frequency ripples are still present, but since they now act mainly in one direction, the telephone diaphragm will respond to each group of these as though it were a single wave with the form of Figure 2.

The foregoing description is of the Standard Three Circuit Regenerative Tuner. This was chosen because it is a good reliable type of tuner and the basis of most of the new and trick-circuit tuners. It is not too complicated for the novice to build and operate and at the same time presents all the principles used in any receiving set except that of the audio-frequency amplification, (the regenerative principle really being a type of radio-frequency amplification). If it is desired to amplify the rectified impulse, i.e., the currents in the plate circuit of the detector tube, we must use a second tube and an audio-transformer. The primary of this is connected where the phones are in Figure 6. The other connections are shown in Figure 6-A. P and S are the primary and secondary coils of a transformer. This is made with an iron core, the coils P and S both being wound on it and both consisting of many turns of fine wire, though the secondary usually has several times as many turns as the primary. Since a transformer of this type steps up the voltage, the impulses applied to the grid of the next tube are considerably greater than those in the plate circuit of the first tube. They therefore cause correspondingly greater changes in the plate current of the second, or amplifying tube. For convenience this tube has been shown with a separate A battery as well as a separate B or plate battery, but it is more usual to use the same A battery for both tubes and control the currents through the windings of each by separate rheostats (adjustable resistances shown at R and R-1). If a loud speaker is to be used, it will generally be necessary to add another tube and transformer, they being connected to the first amplifier in the same way that the first is connected to the detector. Attention is called to the fact that no grid condensers or grid leaks are used with the amplifying tubes, for the reason that no rectification is needed (or desired) but simply amplification of the previous impulses as received from the detector tube.

From the last amplifier tube the current goes through the telephones or loud speaker and is converted into sound. This is accomplished in the same manner as in any telephone receiver, the principle being that a varying current through a coil produces a magnetic field of varying strength, which field may be made to actuate a diaphragm and hence give off sound waves in synchronism with the waves of a current passing through a coil. In a majority of telephones the coils are wound on poles of a horse shoe magnet and the diaphragm (made of thin sheet iron) held very close to the pole tips. Any varia-
tion of the field strength will then cause a movement of the diaphragm, which movement will cause a sound wave in the air.

In the foregoing it has been assumed the reader is at least slightly acquainted with the most elementary principles of electricity and science in general. No attempt has been made to give exact values for the various parts nor directions for making any particular sets, as that is not the purpose of this article. Likewise the detailed application of the principles discussed will vary somewhat with the type of set in question. Should there be sufficient demand for it, the authors will be glad to give specific instructions for the making of a few of the best sets that can be constructed at the various price ranges.

WILLIAM BYRD HARRISON AND GEORGE WARREN CHAPPELEAR, JR.

THE ETHICS OF BIOGRAPHY WRITING

NOTHING but a love of gossip satisfactorily accounts for the genuine satisfaction a reasonably indiscreet biography gives us. The keen delight that stirs within us at the suggestion of “secret memoirs” or at the less than subtle insinuation in the word “real,” as is frequently the fashion nowadays in revised biographies, is as full of revelation as many an autobiography that purports to bare the recesses of some richly experienced soul. Even the most austere among us are inclined to find some apology for mortal dishabille.

We are told in that schoolboys’ bête noire, Caesar’s Commentaries, how the newsmongering Nervii were wont to lay hands on all strangers passing their way and demand, under the threat of punishment, that the newcomers tell them stories of people and places in other parts of the world. Nice perception did not seem to be a prominent characteristic of this Gallic tribe; all that they insisted upon was that they be told something they had not heard before. Even in this far-away day we are no less curious for something new; the aliquid novi is still one of the highest goods; and it plays nowhere a more important part than in things biographical. Unlike the Nervii, however, we prefer stories that are real and true; but our words “real” and “true,” when applied to biography, seem to carry with them the paradoxical but usual meanings of “objectionable and “immoral.” The announcement of a forthcoming publication, offering a feast of inner-circle news of some prominent figure in public life, any sort of revelation of state or stage secrets of a picturesque character, never fails to bring its thrill even to the blasé fictionist. Hence, The Mirrors of Washington or The Mirrors of Downing Street, no less than a Jefferson’s The Real Lord Byron or the French memoirs of the Napoleonic era, reflect as perfectly the character of their readers as of those whom they image more or less successfully. With the sweet morsels of gossip under our tongues, we amusedly murmur humanum est—narrare.

Carlyle’s Reminiscences were received with rapture by his generation, because his contemporaries were glad to find that, despite the eminence he had obtained, he had quite a liberal allotment of faults and was in so many respects not greatly different from themselves. When, however, as literary executor, Froude presented a more extensive picture in his Thomas Carlyle, his efforts were met with a storm of abuse; for Carlyle’s friends felt that even if Froude had painted Carlyle as his friends believed him to be, yet there were many things that should not have been said by one so close as Froude had been to Carlyle. Looking at the office which Froude performed from the standpoint of biographic art, however, and in a later generation, we feel that the literary executor was justified in accepting Dr. Johnson’s view that men should be judged by the mass of their characters; and surely Carlyle could stand the whole truth, if any one could. The question of propriety, it seems, might be applicable to the admission of certain letters of an intimate nature, but of no special biographical bearing; otherwise, the consensus of opinion is that Froude achieved one of the great triumphs of biographical literature.

Unpardonably grievous, however, are the literary sins committed in the name of candor. The ultra-candid advocate, with examples in mind drawn largely from the literature of the confessionalist, mistakess the desire to pro-
duce something sensational for that of exemplifying the true biographical spirit. Evil it is true, is usually mingled with the good in all strong personalities and deserves its fair place in the biographer’s portraiture; but that fair place has this limitation, beyond which the biographer, whatever his relation might have been to his subject, dare not go: Is this a true portraiture of the man whose character I am aiming to present? Is the material I am considering of value in painting the picture in its true colors?

The limits in the use of biographical material that may safely guide the biographer in his relationship to the public, as well as to his subject, are definitely set by the function of the biographer: he is emphatically a compiler, not a creator. Had Southey sufficiently realized the nature of his office, he would not have marred his otherwise splendid Life of Nelson by intruding his own moral views of life on his readers in what purports to be the life of Nelson. It was likewise the persistent dwelling on the penumbra of Poe that made Griswold’s biography of the poet a veritable literary crime. A portrait, we are well aware, may not become a picture with the shadows left out, but if the shadows are made too prominent the portrait is likely to be spoiled. Our own best philosopher in this field, William Roscoe Thayer, is insistent that, in writing biography we should tell the story as nearly as possible as the actor or hero underwent it. “Truth, naked, unblushing truth,” is Gibbon’s first essential in an autobiography. And there is more than a half-truth in the witticism that defines an autobiography as “only what a biography ought to be.” Cellini’s Memoirs represent the author as guilty of almost every crime known to humanity. While the picture presented is not a particularly creditable one, our Italian artist had the keenness to appreciate the truth of the French maxim that every good biographer must adopt as his blue light in the matter of compromising with his subject and the susceptibilities of the subject’s friends and relatives: Tout comprendre, c’est tout pardonner.

However charming amiability may be in the actual intercourse of life, it is surely not a praiseworthy characteristic in a biographer. A reviewer of Balfour’s efforts to tell the story of Stevenson’s life makes this significant criticism: “Mr. Balfour has completely suppressed a very unedifying but most attractive Stevenson in favor of the heroic gentleman who wrote Vailima prayers and abounded in lay sermons.” Boswell did not make a saint of Johnson, nor Moore of Byron; they felt too strongly the assurance of Pliny: *Qui vitia odit, homines odit.* Shakespeare, to whom we look for a finished bit of wisdom for all relationships of life, declares that “the best men are moulded out of faults.” Carlyle’s Reminiscences may be correctly pronounced the “unkindest and most scornful book in English literature,” but the author has a higher conception of the duties of a biographer than Mr. Balfour apparently possesses. Brutal frankness in biography, simply as such, has not much in it stavor; but no man has a right to be judged by his strengths alone. The real likeness, if there be one, must be made up of lights and shadows. It is indeed difficult to be charitable toward the freakish view (taken from the preface of a current biography) expressed in these terms: “The writer of this memorial has not thought it necessary to call attention to defects in the character she has sought to portray.”

The purpose of biography is to present what is characteristic and habitual in the life of the subject. The incidents, of course, that indicate temperament, opinions, personal habits, oddities, prejudices, and, to whatever extent they affect character, the occurrences that reveal weaknesses, foibles, indiscretions, and vices, have a place in the composite picture that the biographer by virtue of his office is obligated to present. Egotism, in reality, is to a large extent the material with which the biographer is working. Such is the source of interest and strength in Boswell’s Life of Johnson.

In the interest of the highest truth, however, there is sometimes not only a legitimate but decidedly advisable and praiseworthy type of suppression that every biographer will insist upon as both his and the subject’s right. There are, for instance, incidents and temporary mental attitudes in the life of every individual that are not the outgrowth of character; such mere incidents have no place in the story of a life, but serve only to dim the biographic outlines. Literary critics are inclined to raise the cry that modern biography, owing to an apparent lack of discrimina-
tion in material, has become both artless and cumbersome. Delicacy and good taste, it should be understood, are not in conflict with depicting the subject as he actually lived among men.

That a biographer should deliberately set himself to the task of defending his subject is an undertaking in itself wholly indefensible. Magnified epitaphs and extended biographical tracts have very justly received the condemnation of Mr. Asquith and other critics, as contradicting the rightful function of biography. They are, in reality, as serious literary distortions as biographies written for the purpose of illustrating a theory. We may safely accept the injunction to be on our guard against the biographies of an advocate. Whatever may be said of Hallam Tennyson's Life of Alfred Tennyson as a filial undertaking, it is obviously more of an idealization of the poet than it is a life of Tennyson the man; the son's reverence for his artist father misled him into erecting a monument to the poet's art. Likewise, Stowe's Lady Byron Vindicated, as a biography is as inherently false as the family or official compilation purporting to be the complete story of an individual. The object of biography can not be regarded as effected by either eulogy or satire; hence Lady Shelley's biography of the poet, as is the case with almost all other biographies of Shelley, is as offensive on the one hand as Macaulay's essay on The Life of Samuel Johnson is on the other. Both err in the extreme in their conception of the rightful purpose of biography. Notwithstanding La Rouchefoucauld's standard that "our enemies come nearer the truth in their judgment of us than we do in our judgments of ourselves," we are far from being persuaded that even the brilliancy and encyclopedic knowledge of Macaulay can atone for the inevitable obliqueness with which he has treated his subject. It is, rather, wise and well-regulated sympathy, interest, appreciation, and enthusiasm that must be looked upon as prime qualifications in a biographer.

Our library shelves are laden with literary white-washings. While it is of the utmost importance that the biographer should be entirely free from bias or a desire to compromise unwisely, yet quite as objectionable is the practical application of the motto: De mortuis nihil nisi bonum. As a motto for the biographer it should read: De mortuis nihil nisi verum. "Certain fashionable biographies of the present day," declares Edmund Gosse, "deserve no other comment than the word 'lie' printed in bold letters across the title page." The true biographer does not allow himself to descend into the state of an apologist; nor will he, whatever may be his personal admiration for his subject, allow himself to make an idol of that subject. Suetonius presented the Caesars with the same freedom with which they lived; but, like the good biographer he was, he did not show himself to be primarily concerned with making a book; his concern was apparently the depicting of these ancient worthies as their contemporaries knew them. The essential spirit of enthusiasm is present in his work; and best of all it is enthusiasm for the truth. La vie publique, whether it be a Caesar or a political boss of one of our great cities, can no more be treated in disregard of the truths of literary art than an Amiel or a Guerin.

Biographers are credited with being hilarious liars. Much of our recent memoir-writing, in point of fact, is nothing but systemized and padded journalism; and it is the atmosphere of journalism that is responsible for the chaos into which the vital and the trivial are so frequently blurred. Next to fiction, biography is perhaps the most commercialized branch of present-day literature. The journalizing of the art of biography is undoubtedly the greatest blight under which it now rests. It is of moment to compare the Journal of Eugenie de Guerin, in which is found one of the sincerest, as well as most intimate, relations of a soul that the world possesses, with the host of post-war biographies, of which the Memoirs of the Ex-Kaiser is a fair sample. The spiritual grandeur of the former in contrast with the self-vaulting, braggart attitudinizing of the latter brings out the literary freshness and charm of the literary biography as infinitely superior to the journalistic apologia of the former German war-lord.

Too many biography writers, who are in no sense biographers, as is the case with Germany's great paranoiac, see their work as drama or epic, and, consequently, laws other than those belonging to the art of biography control their efforts. Official position may
constitute a vantage ground from the standpoint of advertising, but can not of itself give a warranty of success in producing a work of art. Unfortunately, such pithless memoirs tend to drive better work from the field. The biographies of dull, pompous, or priggish people, as well as those written by such, must not be confused with literature, whatever honors their writers may have had bestowed upon them.

The failure on the part of biographers to get a proper conception of their function has given us many biographical myths, and accounts, in a large measure, for the ever-growing list of common-place and bad biographies. To secure the right result in biography, there can be no other motive than that which inspired the admirable Boswell: a desire to perpetuate for all time the life of a great figure as he walked among men, an enthusiasm for the truthful presentation of the admired figure, but an admiration for the character and achievements of the man of such a nature that the only aim in the biographer's mind is that men coming after may know and properly estimate the subject with the same fidelity to truth as that which evoked the writer's efforts. The subject of a biography does not determine its common-placeness; this is rather the result of method of treatment. Sainte - Beuve's Portraits deal with people who made very little stir in the world; yet each succeeding generation adds a host of admirers to this biographer's work. Carlyle writes, in his Life of Sterling: "I have remarked that a true delineation of the smallest man, and his pilgrimage through life, is capable of interesting the greatest man."

While the spirit of enthusiasm for a subject is a splendid asset, when not allowed to control the admission or exclusion of material that may gain biography's legitimate end, yet a spirit of extenuation, indicating as it does an ulterior motive or at least a warped judgment, admits of no defense. That the best men are but men at best can not justify the impression of obliqueness in the treatment of a life; the essential thing is rather an attitude towards the truth as uncompromising as that of a Cato. Unpopular characters have too frequently made their appeal to would-be biographers, because of the opportunity thus offered to espouse a cause, take issue, or set history straight. The result of such work has been to make respectable, apparently, a biographical moral code somewhat similar to that set forth by Cellini, in extricating himself from one of his difficulties: "Bethinking me first of my own safety, and in the next place of my honor."

More fatal than the characteristic of obliqueness in the writing of biography is the inexcusable trait of malice, as evidenced, for extreme illustration, in the Duc de Saint-Simon's portrait of Louis XIV. Drawn with the most deliberate animosity, the barely concealed motive of the Memoirs, it has been uniformly regarded as a type of the unethical in biographical writing. A like spirit is manifest in Purcell's Life of Cardinal Manning, written in an utter disregard for the truth as some of the political sketches of prominent political characters both here and abroad. We can but recall Othello's injunction to Lodovico and Montano:

"When you shall these unlucky deeds relate, Speak of me as I am; nothing extenuate, Nor set down aught in malice."

Edwin's editing of Pope, for the same reason, has been uniformly regarded as a literary sin and blunder.

We sometimes might wonder what the wives of Ruskin, Byron, and Carlyle thought of them. But would our estimates of the essential characteristics of these outstanding literary figures be greatly modified by such prejudiced views? Doubtless Xantippe's biography of her husband would have contained some details in the life of that illustrious gentleman which Xenophon failed to chronicle for us; yet the friction in the domestic life of the Greek philosopher, presented from so partial a view of the character of the man, would not likely alter our judgment of the man. The wives of these men may have known them better than the outside world knew them, but it is doubtful if they could have given an impression of fairness in their estimates of characters which they could not weigh dispassionately.

That a calm, judicial review of the life of a near one is possible is evidenced in Max Müller's story of his father's life. We have no reason to believe that the son has not given us a picture as true to the life of his subject that a portrait painter could have given us a picture as true to the life of his subject that a portrait painter could have given us.
en of his physical lineaments. A similar success may be instanced in the biography that the poet Crabbe wrote of his father. There seems little doubt that unfavorable prejudice if not real malice on the part of the early biographers laid the foundation for many of the distorted views relating to the characters of Sir Francis Bacon and Edgar Allan Poe. Maltreatment at the hands of prejudiced biographers gives some justification for the bitterness of the cynic's view—

"That glory has long made the sages smile;
'Tis something, nothing, words, illusions,
wind—
Depending more on the historian's style
Than on the name a person leaves behind."

Sydney Lee holds that the main business of a biographer is to transmit personality. If he had added temperament, he would most assuredly have presented the two outstanding considerations in biography writing. We are accustomed to the emphasis upon character, which deals with those things that exhibit the individual's purpose and action; but the real charm of biography, as distinguished from the mere event-story, consists in that subtle something which has more to do with the individual's manner of living and tastes for life, commonly called "personality." Laura Spencer Porter, in Haunted Lives, discards the usual biographical procedure for a real philosophy of biography:

"All these Time at last—the only lastingly considerable biographer—rejects and throws away. That which Time retains as precious and imperishable is rather some fine essence of the spirit; some essential personality built up and moulded by preferences, predilections, and prepossessions of a most highly spiritual order. The loves, the desires, the dear delights of men; the returning dreams, the recurrent longings that will not be gainsaid; the dead and long-lost dreamings that revisit the glimpses of our moon—these are indeed the spirit of us, and our immortalities."

There are apparently some lives which defy recognized biographical methods; under current, as well as past, standards there is such a thing as the abibographic life. The fault lies, perhaps, more in the limitations of our speech than in the biographic art. Language, seemingly, is not capable of depicting the fineness of some human characters; they seem rich beyond expression. Ellis, Yates, Garnett, Story, Swinburne, and Gilfillan have successively tried to present the life of William Blake; each in turn has doubtless felt, as Carlyle did in the case of Burns, that all previous biographies left much unsaid. Unlike the story of such a life as that of Daniel Boone, the problem does not lie in the presentation of the events of his life, but rather in harmonizing a rare combination of mind, heart and character qualities into a full, rich, consistent whole. Yet the real life of William Blake has not yet been written. Such lives possess a spirit of child-like vanity, the ingredients in the make-up of such self-biographers as Eugenie de Guerin, which the biographer needs to know how to appreciate and handle, to make his composite picture. Only the biographer who is able to look at the world through the eyes of his subject can hope to succeed in presenting that life truly to others.

Whatever may be the nature of his problem, however, the biographer's duty to both his subject and the reading public is clear and unmistakable; the world has a right to an honest, richly complete presentation of the character and achievements, personality and temperament, of the subject, as true to life as human skill can make it. The biographer must evidence in all the finer adjustments of the inner and the outer facts of the life of the individual not only a perfect knowledge and appreciation of the rules of the art side, but in every way "a manliness that will not let him lie."

It is difficult to think of any other kind of writing that reveals so much of the character of the writer; not even in history is there the same opportunity for the play of character upon character. A realization of the ethical demands in this type of literature would undoubtedly lessen the number of biographical travesties that yearly pour from our presses. A sacred duty or a high privilege admittedly calls for the best that is within one; when the duty takes the form of biography, the task must be performed without the thought of the invisible censor.

"Grey are all theories
And green alone Life's golden tree."

JAMES C. JOHNSTON.

ON THE ACCURACY OF TRAINING IN THE FUNDAMENTAL OPERATIONS OF ARITHMETIC

A test of the fundamental operations of arithmetic, the Woody-McCall Mixed Fundamentals, Form I, was given to a group of first year students at the State Normal School at Harrisonburg, Va., seven weeks after the opening of the session. Of this group 244 were graduates of accredited high schools of Virginia within the last four years. This group divided itself into four sections by the choice of its members to prepare themselves to teach in the primary grades (Pr.), the grammar grades (Gr.), the high school (H. S.), or in the field of home economics (H.E.).

The test was given to the group at one time, exactly according to the printed instructions with the single exception of the time allowed, which was twelve minutes instead of twenty. This number was arrived at by allowing the group twice as much time as was required by the pupil who completed the whole test first. The results are tabulated below in Table I.

TABLE I

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A glance at the position of the median in the first four columns reveals a considerable variation. The high median in the Gr. column is easily explained by the statement that this section had been taking a course in arithmetic for the grammar grades for seven weeks, while none of the other sections had had any arithmetic during that time. For this reason the extra column has been added, giving the scores for the 184 students who had no instruction in arithmetic. The difference in the other three groups may be accidental.

It is the intention of the writer to carry on a series of experiments covering a term of years to determine if possible whether there is any relation between ability in arithmetic and the choice of the grade in which an individual desires to teach.

An analysis of the class of errors was made as follows. In Table II the column on the left gives number of the problem on the sheet. The other columns give the respective number of failures to solve the given problems in each of the groups and in the whole group.

TABLE II

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The errors in the last four exercises were mostly either omissions or failures to simplify results. On account of the shortness of time allowed in taking the test, the results of the last four exercises are therefore discarded as meaningless.

The average number of errors for each individual then appears as follows:
Pr.  5.6
Gr.  4.3
H.S. 4.6
H.E.  6.5
Whole Group 5.1
Whole Group Less Gr. 5.4

Examining the frequency and the kinds of errors in the whole group we find
161 or 66 percent failed on No. 16, 0.003 \( \times \) 0.0936
140 or 57 percent failed on No. 30, 3 7/8 \(-\) 1 5/8
136 or 47 percent failed on No. 29, 62.50 \( \div \) 1 1/4
127 or 44 percent failed on No. 22, 23 \( \times \) 489
72 or 30 percent failed on No. 28, 6.25 \( \times \) 3.2
70 or 29 percent failed on No. 27, Add 2 1/6, 6 3/8 and 3 3/4
65 or 27 percent failed on No. 29, Add $8.00
5.75
2.33
4.16
.94
6.23

64 or 26 percent failed on No. 21, 24 \( \times \) 234
48 or 20 percent failed on No. 16, Subtract 567482
106493

46 or 19 percent failed on No. 18 8754 \( \times \) 8

The writer submits these results to teachers of arithmetic without comment, except to state again that the pupils who took this test are all graduates of accredited high schools of Virginia within the last four years.

HENRY A. CONVERSE.

PURPOSEFUL ACTIVITY IN THE THIRD GRADE

A PURPOSEFUL activity or project in the form of dramatization of plays has just been completed in the 3-B grade of the Harrisonburg Training School. The entire project, from beginning to end, was the work of the children—initiating, planning, executing and judging. Of course it was not without many defects, but the benefits derived by the children were more than anyone expected, and many children who were usually backward came up to the standard, offered valuable suggestions and did splendid work in a most surprising way.

The beginning was natural, coming entirely from the children. One group asked to "play a story" which they had read. Consent was given and the performance was staged. The children were delighted with this and asked if they could give other plays. Then another child suggested that they make their plays like real ones and have costumes. To this a third child added the idea of a stage, a real curtain, and eventually the idea of scenes was initiated. Plans rapidly developed, and by the end of the reading period the children had decided upon dividing the class into various groups, and each was to give a play. When one child found a story that he wanted to play, he could call a group together and if it was agreeable to all concerned, that story was decided upon. And so in this way six groups originated, giving the following plays:

1. Peter Rabbit
2. Tom Tit Tot
3. The Three Bears
4. Snow White and Rose Red
5. Red Riding Hood
6. Epaminondas

Every child in the room was to take part, but one child was selected as the manager of the play, and under his leadership it made rapid progress.

In order to decide upon the plays that they could best give, much reading had to be done. Stories of every sort were read, and one child, who had heretofore had an aversion to reading, began reading with interest. He was rewarded by being made manager of his group by the children. The reading taught the children new words, gave them new thoughts, and added to their knowledge of good stories. Aside from valuable work for the children in reading, the following subjects were used:
1. Arithmetic

One child had to have a paper costume. She had to decide on the number of rolls of paper needed, and then she estimated the cost. All of the children in her group were interested and offered suggestions as to how it could best be made. Then one of the student teachers in Arithmetic class made problems for the lesson regarding various phases of the play work. One of the examples read: "One roll of paper costs 10c, Jean needs two rolls for her costume. How much will the costume cost?"

2. Writing

The children decided to write invitations to their friends about the play. They did the best writing that they could, and the results were very good.

3. Spelling

The question of what words they would need to know in order to write the invitations came up. These words were written down and next day given as a spelling lesson. Such words as "delighted," "invited," and "January" were given.

4. Language

The question uppermost in the minds of the children, and one that presented a real problem to them was—What shall we say on our invitations? Suggestions came and the children talked it over. Then each child was to write his invitation in the nicest words that he could use. Some of the results were crude, but the children had practical application of sentence making and punctuation.

In every worthwhile project other things develop besides the subjects of school life and real book knowledge. Things that make for good citizenship and a well rounded life often start from the small incidents of school life. To make the child think and act on his own judgment is one of the desired results of teaching, and is a desired outgrowth of good instruction.

The children developed tremendously along many lines, as shown by the following illustrations:

1. Co-operation—The spirit of helpfulness predominated during the entire two weeks spent on the work. Whenever one child could help in any way he did so, and entirely in a way that suggested interest rather than a merely interest rather than a desire to display a superior knowledge. When children needed things for their various costumes various children offered to lend, and when the children promised they never seemed to forget.

2. Judgment:—In the selection of characters, (a) Who will be best, and (b) Who looks most like the persons in the story. In number of scenes to be used, (a) Deciding on what should be used in each, (b) How long to make each. Costumes, (a) Kinds, (b) Of what material, (c) Furniture for the stage.

3. Leadership:—Each group had a manager who was responsible. The manager looked after costumes, stage set, etc. (Children who were usually backward, or sometimes very quiet, developed amazingly, and the best performance was given by a group that ranked low in scholarship.)

4. Self-criticism:—The children who were not on the stage watched and gave suggestions as to where the play could be improved. These were sensible, helpful suggestions, and tended to make the play much better in every way. If a child failed to talk enough, others would immediately tell him.

5. Handiwork:—In the making and planning of costumes. In the "Peter Rabbit" play the rabbits had caps with ears for their costumes. To the children this presented all that was desired in the way of a rabbit makeup. In the making of pictures to illustrate stories, (a) Selection of colors, (b) Cutting and pasting of various parts, (c) Criticism of finished picture and possible retouching or remaking for improvement.

6. Ability to solve difficulties:—One child couldn't unbutton her coat. After much trying she slipped it over her feet and escaped. The way she solved her difficulty will help her in aiding herself in other trying difficulties. When the curtain fell during the performance given to parents, and scarcely more than three minutes elapsed before the performance was resumed.

7. Spirit of fairness:—No child was allowed to monopolize conversation. Each had an equal right to suggestions and also his share of the work.
Development of imagination:—In making pictures. Part of a costume sufficient for the whole.

The children really lived the parts, and aside from visible outgrowths of the activity, there were many that have made a lasting impression. Ability to speak before a crowd without embarrassment, self-expression, freedom of thought and action, discernment and ability to give and take equally as well were all developed. The things accomplished lead on and up and the work just completed will be a valuable step in the work of the children and will largely affect the work they do in other grades.

Bertha McCollum.

TEACHING BANDAGING IN TWO WEEKS

How thirty pupils could learn to apply correctly twelve different kinds of bandages in two weeks was my problem. Realizing that bandaging is one thing that must be learned by doing, I divided the class into groups and had each group strive for a goal. This plan the pupils accepted with much interest. They elected six members of the class to be captains of the groups. These captains chose their groups, consisting of about five or six members each.

All of the groups started to work with much vim, first watching me apply three different kinds of bandages. At the beginning of each day I applied several new bandages until all twelve kinds had been demonstrated.

Each captain made a score card, putting the names of the twelve different kinds of bandages across the top and the names of the members of the group down the left side of the card. As soon as a pupil put one bandage on correctly, a check was put by his name under that bandage. A check could not be given until the teacher sustained the judgment of the group leader on the bandage.

A large poster, with the names of the bandages across the top, but with names of the groups down the left side, was placed in the class room. This was done so all the pupils could see the work of each group.

When all of the members of one group got a check for a certain bandage, the group was awarded a star, which was placed on the large poster. The group working most quietly each day was also awarded a star.

At the close of the two weeks, when all had about completed the bandaging, we had a contest between the groups. Two members from each group were elected by the group to take part in the contest, one to do the bandaging and one to act as patient.

All six groups were given the same kind of bandage, and when the signal was given they started work. The judges took into consideration the neatness of the bandage and the length of time it took to apply it. Group Four, girls, and Group Six, boys, were the winners.

The thirty pupils were interested throughout the entire time and, moreover, accomplished a great deal of work.

Elizabeth Collins

REPORT OF COMMITTEE ON SELECTIVE IMMIGRATION

Immigration an Investment in Family Stocks

Our immigration policy in the past has been too much a matter of temporary economic or political expediency. One of the most encouraging recent developments is the rapidly growing conviction on the part of our people that, as Dr. H. H. McLaughlin has stated it, "immigration is a long-time investment in family stocks rather than a short-time investment in productive labor."

The Two Fundamental Principles in Immigration Legislation

Two essential and fundamental principles should be recognized in our future immigration legislation. The first is numerical limitation. The second is careful selection within the established limits.

Suggestions for New Legislation: I. Percentage Limitation Based on the 1890 Census

Americans have been doing a good deal of serious thinking on the question of their future immigration policy. It is a difficult problem, but public opinion is crystallizing around
these three points: (1) Never again is there to be an unlimited inflow of cheap alien labor; (2) a numerical limitation of immigration is here to stay; (3) there must be a careful selection of our immigrants within the fixed limits. To accomplish these ends we should have (1) percentage limitation, based on the census of 1890, and (2) some form of over-seas inspection. A definite numerical limitation has long been advocated by authorities on immigration. The conviction that the census of 1890 should be used as the basis of any percentage law has been growing rapidly all over the country. Since there were fewer southeastern Europeans here in 1890 than in 1910, a percentage provision based on the former census would decidedly cut down the numbers of such immigrants. This provision would change the character of immigration, and hence of our future population, by bringing about a preponderance of immigration of the stock which originally settled this country. On the whole, immigrants from northwestern Europe furnish us the best material for American citizenship and for the future upbuilding of the American race. They have higher living standards than the bulk of the immigrants from other lands; average higher in intelligence; are better educated; more skilled; and are on the whole better able to understand, appreciate and support our form of government.

A percentage limitation based on the 1890 census is sound American policy, based on historical facts. It is not here a question of racial superiority of northwestern Europeans. It is simply a question as to which of these two groups of aliens as a whole is best fitted by tradition, political background, customs, social organization, education and habits of thought to adjust itself to American institutions and to American economic and social conditions; to become, in short, an adaptable, homogeneous and helpful element in our American national life. As President Coolidge tersely expressed it in his recent message to Congress: “America must be kept American.”

The country at large has been greatly impressed by the results of the Army intelligence tests made during the war, which have been carefully analyzed by Lieut. Col. R. M. Yerkes, Dr. C. C. Brigham and others. That recent immigrants from northern and western Europe make significantly higher scores, on the average, than do immigrants from southern and eastern Europe seems established. Along with the shift of the past few decades in the tide of immigration from northern and western Europe to southern and eastern Europe, there has gone a decrease in intelligence test scores of the immigrants entering this country. The experts who have analyzed the statistics and who have tested the tests believe that the responses on the tests give as accurate a measure of intelligence as is possible at the present time. The questions making up the examination were selected with a view to measuring innate ability rather than acquired information and education. In addition, individuals who were handicapped by a lack of knowledge of the language due to shortness of residence in this country or for other causes, were given performance or non-language tests, which eliminated this factor. While some persons are sceptical about these results, it seems clear that the majority of those who have gone into the matter are satisfied that the conclusions reached are essentially sound, and that certain important facts regarding the intelligence of our immigrants have been established.

Experts have told us that had mental tests been in operation, and had the “inferior” and “very inferior” immigrants been refused admission to the United States, over 6,000,000 aliens now living in this country, free to vote, and to become the fathers and mothers of future Americans, would never have been admitted. The facts are known. It is high time for the American people to put a stop to such degradation of American citizenship, and such a wrecking of the future American race.

Dr. H. H. Laughlin, Assistant Director of the Eugenics Record Office, a department of the Carnegie Institute (Washington), has recently made a very thorough investigation of the “socially inadequate” groups in 445 state institutions housing the feeble-minded, insane, criminals and delinquents, epileptics, blind, deaf, deformed and dependent. This investigation was for and under the auspices of the Committee on Immigration and Naturalization of the 67th Congress, and published in the Hearings before that Committee. Of the institutional population thus studied, 44% was either of foreign birth or had one or both parents foreign-born. These
figures take no account of the foreign socially inadequate in private institutions, or supported by private charity outside of institutions. Dr. Laughlin’s studies bring out another very striking and important fact, viz., that immigrants from northwestern Europe on the whole contribute far less in proportion to our alien socially inadequate institutional population than do those from southeastern Europe.

A percentage limitation based on the census of 1890 would therefore not only reduce (1) the inflow of unskilled, “cheap” labor, but would also greatly reduce (2) the number of immigrants of the lower grades of intelligence and (3) of immigrants who are making excessive contribution to our feeble-minded, insane, criminal and other socially inadequate classes. Percentage limitation based on the 1890 census therefore is the simplest, most logical and most effective means readily at hand for accomplishing all three of these very necessary things. The original argument in favor of the percentage law was economic. The fundamental reason for its continuance is biological.

Consular Certificates for Intending Immigrants

We need both (1) a far more effective system of inspection at our own ports, and of (2) some sort of preliminary selection overseas. The former requires larger appropriations and more and better paid inspectors, both general and medical. The latter has for years been advocated as necessary and humane—a benefit to the United States and a means of preventing unnecessary hardship to the alien. Consular certificates should be required of each intending immigrant before he starts on his voyage. This certificate should contain answers to questions essentially the same as are asked of the immigrant on his arrival at our ports, as well as full information about his health, civic record, political activities and character, and the general standing and health of the immigrant’s family. It should include a statement from the responsible police authorities of the immigrant’s residential city or district that the applicant has not been convicted of crime (other than political), and should be verified before a United States consular officer abroad. While there would undoubtedly be many cases of perjury and of fraud in this connection, there can be no question that a very great many undesirable aliens, excluded by law, would be headed off by our consuls when application was made. Such a certificate plan would reduce hardships to the absolute minimum; avoid the division of families; save the nationals of other countries the expense, perils and hardships of the ocean trip to the United States only to find that for some reason the immigrant or some member of his family can not enter. Certificates should be issued only up to the numbers allowed by the quotas, and should be good for six months, so that if an alien came at any time within that period he would not be denied admission as being in excess of the quota allowance. This provision would also stop the rush of aliens at the beginning of each month, and would make possible a more deliberate and more thorough medical inspection—an improvement very greatly to be desired. Under this plan the real inspection, medical and otherwise, would be made at our own ports, as it should be, but most of the aliens who would be excluded on examination here would never start on their journey. The certificate plan, then, would, through the preliminary selection overseas, benefit the United States. It would also very greatly diminish the hardships of the alien. It is selective. And it is humane.

Mental Tests for Immigrants

If our future population is to be prevented from deteriorating, physically and mentally, higher physical standards must be required of all immigrants. In addition no alien should be admitted who has not an intellectual capacity superior to the American average. Aliens should be required to obtain a passing score of, say, the median in the Alpha test, or the corresponding equivalent score in other approved tests, these tests to be given in the native tongue of the immigrant. Further, if possible, aliens whose family history indicates that they come of unsound stock should be debarred.

Requirement of Cash Bonds When Aliens Are Admitted on Appeal

The general Immigration Act of 1917 gives the Secretary of Labor authority to admit certain classes of aliens under bonds. In theory, this is a humane provision. In prac-
tice, it has resulted in the admission in past years, of many thousands of aliens who had been certified by competent medical examiners as having such mental or physical defects as constituted them potential public charges, or otherwise highly undesirable elements in our population. The bonds are usually taken out through a surety company by a relative or friend of the admitted alien, or by an immigrant aid society. These bonds, in most cases, are worthless. For many reasons, in which the relative or friend plays the chief part, the alien admitted on "appeal" is soon "lost." Changes of residence, changes of name, and removal to another state are common schemes for bringing this about. In many cases the relatives or friends are willing enough to care for the admitted alien for a time, but soon lose interest in him, and are perfectly willing to have their bonded fellow-countryman taken care of by the community. A large percentage of all bonded aliens have violated and forfeited their bonds and are in the United States, some in public institutions; some supported more or less of the time in public institutions; some supported more or less of the time by public or private charity; most of them at large, a social menace, themselves in many cases mentally defective, they produce mentally inferior children.

This very serious situation, recognized as such by all competent authorities on immigration, should be at once remedied. Aliens should be admitted on appeal over the heads of the medical examiners only in very rare and exceptional cases, and in such cases cash bonds in substantial sums, say $1,000 or more, should be required. This money should be held at interest in the U. S. Postal Savings Bank. If, at the end of five years, the alien has proved to be a self-supporting and desirable citizen, the principal and interest should be returned to him. If, on the other hand, he has become a public charge or is otherwise undesirable, the money should be used to help pay the expenses of his maintenance, and to deport him. The present "paper" bonding system has worked incalculable injury to our population.

MADISON GRANT, Chairman.

**Objectives and Accomplishments of the Research Division of the National Education Association**

1. The collection of educational facts not otherwise available and the interpretation and dissemination of these facts in time to be of most value. Special studies have been completed on school finance, curriculum, and teachers' salaries, tenure and retirement systems.

2. Furnishes special information in response to inquiries of Association members and affiliated organizations.

3. Serves as an agency whereby the research work of the Association's numerous committees and departments is coordinated.

4. Collects and puts in form for effective use facts and statistics desired by the six other divisions at the Association's headquarters in Washington.

5. Serves as a clearing house for studies in the field of educational research produced by over one hundred educational research bureaus.

6. Regularly issues the Research Bulletin of the National Education Association. Over 100,000 copies have been distributed. The six numbers issued are:

   - Facts on the Cost of Public Education and What They Mean. Bulletin One, June, 1922. (Out of print.)
   - Five Questions for American Education Week, Vol. 1, No. 4, September, 1923.

"The only things that prevent any person from acquiring useful knowledge is laziness, self-indulgence, weakness and procrastination."—Dr. Frank Crane, in *The Mentor*. 
LILLIAN JONES got a raise in salary. She was working in a school where teachers were elected for one year at a time. While she had felt reasonably secure, she had been afflicted with some doubt as to what might happen. Relief came, therefore, with re-election and the larger salary. Perhaps Miss Jones did not know why she got the larger salary. Perhaps not even the board that elected her really knew. An important factor in the decision was research. Someone had gathered the facts to show that there was a shortage of teachers, that salaries were lower than in other types of work requiring similar preparation, and that strong men and women were leaving the profession. Editors of newspapers and magazines, following the lead of the National Education Association, had taken up the cry for better-prepared and better-paid teachers and for secure tenure and improved working conditions.

All of this had reached the school board that employed Miss Jones. They had seen charts dividing the teachers into groups according to preparation and pay. Pride in their children had caused them to provide a salary better than the average that they might be surer of getting a superior teacher. But back of it all was research, bringing to the school board information as to what other schools were doing and a vision born of broad knowledge of conditions throughout the country.

What should a city pay for the services of an inferior teacher? an average teacher? a superior teacher? Does education pay? Can we afford increased expenditure for education? What has been the experience of schools elsewhere in these matters? The welfare of millions of children depends upon the answers that schools make to such simple questions as these.

Every teacher has a vital interest in seeing that school boards have the basic facts with which to answer such questions. If the school board is to have these facts, it must either collect them itself or rely on some central agency to collect and interpret them. If some central agency does not do this work, many school boards decide important matters of policy without having the essential facts needed for a clear understanding of them.

Let us assume, however, that a hundred school boards recognize the need of getting evidence and that each writes to the others and obtains an answer to some one question. Each board sends out one hundred letters and receives one hundred. The transaction requires twenty thousand letters. Let us assume that some central agency writes to each of the boards for the essential facts compiles them, and sends the tabulated and interpreted data back to the boards. Only three hundred letters are required. Measure the three hundred against the twenty thousand and you have a suggestion of the economy of common action by professional organizations.

Add to this consideration the advantage that instead of one hundred schools using the facts that have been carefully prepared, they will probably be used by a thousand boards, thus multiplying many fold the intelligence that is brought to bear on the solution of our educational problems.

It was recognition of this need for common service, particularly in the financial crisis which was then facing American education, that led the Association in March, 1922, to establish its Division of Research at Association headquarters with Mr. John K. Norton as director. Mr. Norton’s training was under Drs. Cubberley and Terman at Stanford University. His experience includes service in various kinds of public school work. Immediately before coming to the Association he was director of the Bureau of Research and extension of the State Teachers College at San Jose, California.

From the first this division has had many more tasks than it could possibly accomplish with the limited funds available from the Association’s treasury. But with its limited funds and staff the Division has made studies and prepared information that has been of inestimable value to education and to the individual teacher.

Hardly had the service begun when a steady stream of letters of appreciation began to tell of its great value to all parts of the country. Every educational worker has an interest at stake whether he be a member of the Association or not. The teacher gains when the Research Division gathers the facts on teachers’ salaries from every section of the country and presents the argument which must appeal to any reasonable board of education.
as to why the salaries of teachers should be increased.

The individual teacher profits when the Research Division gathers material for American Education Week. Out of this week grows a widening appreciation of the real meaning of education and the community's great obligation to its teachers. The Research Division serves the individual teacher in another way. Instead of making at great expense graphs and charts which they can use in a salary campaign, superintendents now arrange to have these made for a small fee by the Research Division of the National Education Association where all materials are on file.

The division has prepared much valuable material for the Association's Journal and for other magazines. Every division of the Association's headquarters which requires information looks to the Research Division to supply that information on short notice. In other words it is the business of this division to put facts to work, to discover from a study of facts what the wisest practices are so that educational workers everywhere may have the best material. That the figures gathered by the Division are used by thousands of speakers, and hundreds of magazines, both lay and professional, is ample testimony to the usefulness of the work. Its findings have also been given to a large radio audience through Station WRC at Washington, D. C.

The impact on the educational advance; the encouragement which this division has given to greater and wiser expenditure for public education reaches to the remotest classroom. Its work touches the life of every child in a score of ways—helping to determine the kind of teacher that shall guide him, the kind of building that shall house him, the kind of books he shall study, the time table that shall regulate his day, and the curriculum that shall chart the mighty seas of knowledge to be learned. These are pressing problems as education expands to larger usefulness. Research throws its life-giving beams upon them all.

Just as thousands of individual school boards working alone cannot well gather the facts they need, so State and local agencies need a clearing house. Assuming that there are fifty State and local research agencies interested in gathering facts on a particular subject, if each of these agencies should write to each of the others, 2,500 letters would be exchanged.

Assume again that they agree upon a common center, that gathers facts from each of them and compiles and distributes the results. Only one hundred and fifty letters are then required. Many more facts can be collected for the money available. Every teacher again benefits. That is another reason for the existence of the Research Division and for the Research Advisory Committee.

This committee representing all phases of education insures that the Division is well advised in its work of coordinating its efforts of the Nation's educational research agencies.

Here then is one other service that is made possible by the small fee that we all pay into our common professional treasury. Like many other of the Association's services, in itself it is worth the entire membership fee to each individual teacher whether a member or not. It is an added reason why every practicing teacher should join the Association and share the deeper sense of professional well-being that is enjoyed by its members. The individual teacher standing alone can do little in research, in obtaining better working conditions, or in securing just public recognition of the importance of the teacher's work. One hundred thousand teachers banded together are a mighty force. Seven hundred thousand would be more than seven times as mighty. They would be irresistible when supporting any program of recognized advantage to childhood and the Nation. It is appreciation of this fact that is leading many schools to maintain one hundred per cent enrollment year after year and many teachers to make special effort to interest others in sharing the work of our remarkable Association.—Journal of the National Education Association.

"Culture means intellectual background. It means accumulated force behind your stroke. It means that you are not only capable yourself, but that you know how to absorb and use the capability of wiser persons."

—Dr Frank Crane, in The Mentor.
EDUCATIONAL COMMENT

TENTATIVE PROGRAM FOR N. E. A. MEETING, CHICAGO

February 23-28

Hotel reservations and the demand for identification certificates by paid-up members who wish the special railroad rates indicate that the meeting of the Department of Superintendence this year will be one of the largest in its history. The programs of President Smith and the officers of the allied groups are receiving their finishing touches as the Journal goes to press. A time schedule showing a general outline of the meetings, luncheons, and dinners, together with officers of cooperating departments, appeared in the January issue. The official program will be distributed at the time of registration. Several meetings of other educational groups are scheduled for Friday and Saturday, February 22-23.

The opening vespers service of the Department of Superintendence will be held Sunday afternoon, February 24, at 4 o’clock, in the Gold Room of the Congress Hotel. All other general sessions will be in the Auditorium Theater, as outlined below.

Monday morning, February 25, 9:15 o’clock, Olive M. Jones, President of the National Education Association, will bring the greetings of the parent Association. Superintendent P. P. Claxton, of Tulsa, Okla., will speak. J. W. Abercrombie, State Superintendent of Alabama, will speak on National Obligations in Education; William Mather Lewis, president of George Washington University, Washington, D. C., will talk on Encouragements.

Monday evening, February 25, 8 o’clock, Judge Florence Allen, of the Ohio Supreme Court, will deliver an address.

Tuesday morning, February 26, 9:15 o’clock, the following program will be given: Recent Achievements and Next Forward Steps in Rural Education, Frank P. Graves, State commissioner of education of New York; Educational Expenditures Considered as Investments, E. C. Hartwell, superintendent of schools, Buffalo, N. Y.; Educational Fads as Fundamentals, O. L. Reid, superintendent of schools, Youngstown, Ohio.

Thursday afternoon, Superintendent J. H. Beveridge, of Omaha, Nebraska, speaks on Some Hazards of the Superintendency, with special reference to next forward steps that should be taken to protect the office of the superintendent and make it more highly professional. Mrs. Susan M. Dorsey, of Los Angeles, will discuss Relations of the Superintendent of School to the Teaching Corps, and L. D. Coffman, president of the University of Minnesota, will give an address in reference to higher education; Superintendent J. W. Studbaker, of Des Moines, Iowa, will speak on School Board Organization.


Superintendents of cities with populations above 200,000 will meet in the Ball Room, second floor, Auditorium Hotel, Monday afternoon and Wednesday morning. The program for Monday afternoon will be on Improving Service. The speakers include: Ernest C. Hartwell, John J. Maddox, and Jesse H. Newlon.

The theme of the Wednesday morning program in Possible Economies. Through General Organization Within the Schools will be discussed by L. L. Cammack, Charles L. Spain, Carleton W. Washburn; Through a Longer School Year by David B. Corson, and Through Central Business Administration, R. G. Jones. Herbert S. Weet, leader.

Superintendents of cities with population 50,000 to 200,000 will meet in the Crystal Room, Hotel Sherman, Monday afternoon and Wednesday morning. The first session’s program follows: Organizing a Curriculum After the Educational Objectives Have Been Determined, J. H. Bentley, C. B. Glenn, and M. G. Clark; Improved Methods of Supervision, William John Cooper, H. B. Wilson, and Daniel J. Kelly; Some Practical Next Steps in the Reorganization of Secondary Education, F. G. Pickell, and W. C. Reavis.

Wednesday morning’s program includes: Planning Schoolrooms to Facilitate Instructional Processes, J. W. Studbaker and M. E.

Superintendents of cities with population 25,000 to 50,000 will meet Monday afternoon and Wednesday morning in the Crystal Room. Great Northern Hotel. At the first conference The Powers and Duties of the Superintendent, and H's Relation to the School Committee and to the Community will be discussed.

The second session will discuss Comparison of the 6-3-3 and the 6-4-2 Plan in Organization of the Elementary and High Schools; Promotion by Subjects; Value of Teacher Organizations; and Safety Teaching in Our Schools. John F. Gannon, leader.


Superintendents of cities with population of 5,000 to 10,000 will meet in Tiger Room, Hotel Sherman, Monday afternoon and Wednesday morning. The Monday's Round Table will discuss the Scientific Method in Administration. The program follows: What Service Should School Systems Render in this Group of Cities. C. R. Gates; Next Forward Steps in Educational Administration. N. L. Englehardt; The New Science of the Public School Publicity, P. R. Spencer; Professional Procedure in the Selection and Training of Teachers in this group of cities, H. A. Sprague; Notable Progress in Administration in this Group of Cities, J. J. Early.


Superintendents of cities with population below 5,000 will meet in the Cameo Room, Morrison Hotel. Monday afternoon and Wednesday morning. Monday afternoon the Curriculum and the Training of Teachers are the principal topics. The program follows: Differences of the Curriculum of Rural Elementary Schools for Grades 1 to 6 and with Those for Similar Grades in City Schools, John M. Foote and Burr F. Jones. Minimum Institutional Training. Florence M. Hale; A Definite Program of Training in Service, Florence M. Wellman and Charles A. Philhower.


Topic conferences dealing with problems of supervision and administration will be held Thursday morning, February 28, at 9:15 o'clock. These meetings will be open to all members of the National Education Association. At the conference on Physical and Health Education, E. George Payne will discuss Health Education in the Schools; William R. P. Emerson, Open Window Classes versus Nutrition Classes; and Frederick W. Maroney, Coordination of Physical and Health Activities. David B. Corson, leader.


The conference on Immigrant Education will discuss The Place of Immigrant Education in a Democratic School System; What the High Schools Have Accomplished in the Education of the Immigrant; and The Outlook for Immigrant Education in the United States. Two committees will report on Federal Leadership and State Leadership and Legislation. A. B. Meredith, leader.


The conference on Educational Publicity will be addressed by W. H. Holmes, R. J. Tighe, Carleton B. Gibson, E. W. Butterfield, J. H. Risley, P. H. Smith, D. C. Bliss, W. H. Allen, and R. G. Reynolds. Charts, graphs, newspaper clippings, and school reports and
bulletins will, during the meeting, illustrate
the talks. L. P. Benezet, leader.

The program of the conference on The
School and the Community follows: Parent,
Teacher and School, M. E. Moore; City Schools
and Community Service, Paul C. Stetson; A
Rural School Community Program, Mabel G.
Bush; The Boy Scout Project, Loren W. Bar-
clay; and School and Community Possibili-
ties, Charlie C. Williams. Frank Cody, leader.

The program for the conference on Major
Objectives of Elementary Education follows:
How Shall We Select Subject Matter of the
Elementary School Curriculum, William H.
Kilpatrick; Reorganization of Subject Matter
in the Elementary School, F. G. Bonser; Re-
organization of the Elementary School to Meet
Major Objectives, Charles L. Spain; Research
in Relation to the Attainment Objectives in
Elementary Education, Ernest Horn; Relation
of Supervision to the Attainment of Major
Objectives, Fred M. Hunter. Jesse M. Newlon,
leader.

Other conferences include: Civic Education
under the leadership of Jeremiah Rhodes,
San Antonio, Texas; Character Education, un-
der the leadership of J. E. Burke, Boston, Mas-
sachusetts; Training Teachers in Service, un-
der the leadership of J. M. Gwinn, San Fran-
cisco, California; and Problems of Junior
High and Intermediate Schools, under the
leadership of Ben G. Graham, New Castle,
Pennsylvania.

The National Council of Education will hold
three sessions Tuesday and Wednesday after-
noons, February 26-28. Prior to these sessions a luncheon will
be held in the French Room of the Congress
Hotel, Monday afternoon at 12:30, February
25, for officers, chairmen and members of com-
mittees.

Tuesday afternoon, February 26, the Coun-
cil will meet in the Playhouse theater. The pro-
gram follows: President's Address; The Work
of the Bureau of Education in Alaska, John J.
Tigert: The Relation of Professional Spirit
Among Teachers to Public Education and the
Devotion of Citizenship, Olive M. Jones; Re-
ports of the Committee on Reorganization of
the National Council of Education, the Joint
Committee on Health Problems in Education,
and the Committee on Extension Education.

The Wednesday afternoon session, Febru-
ary 27, will be held in the Banquet Room of
the Auditorium Hotel. Reports will be given
for the Committee on the Status of the Amer-
ican Woman Teacher, the Committee on Il-
literacy, the Committee on Vocational Edu-
cation, and the Committee on State Funds for
the Support of Elementary and Secondary
Schools.

Thursday morning, February 28, 9:15
clock, a joint session will be held with the
topic conference of the Department of Super-
intendence, dealing with Improvement of
Teachers in Service, at which there will be
reports of the Committee on American Teach-
ers Colleges, the Committee on Training Teach-
ers in service, and the Committee on Partici-
pation of Teachers in School Management.—
Journal of the National Education Association.

CURRENT EDUCATIONAL
PUBLICATIONS

THE PLACE OF INTELLIGENCE
AMONG HUMAN EN-
DOWMENTS

The Mind in The Making, by James Harvey
Robinson. New York: Harper and Brothers,
1921. Pp. 235. $2.50.

One approaches a view of this work in
these latter days with fear and trembling.
There can be no half-way ground in one's
attitude—you violently favor the author's
way of looking at things, or you violently op-
pose it.

Nor do you marvel that at the Universi-
ty of Tennessee such a storm occurred as to
shift the scholastic equilibrium of some half-
dozzen-odd professors and all but blow the
head off "The Hill." A cantankerish, mod-
ernish professor simply favored the point of
view of Robinson. The president of the col-
lege fired the prof and his cohorts for the very
valid reason that he held to a violent dissenting
opinion.

Robinson, with some of the restraint that
characterizes the scholar and some of the
fearelessness which characterizes the innovat-
or, pleads for a wider knowledge of truth.
What that truth is, or may be, he does not
pretend to say. In science, he contends, we
have as a race achieved something of truth,
while our religion and sociology remain an
unimpaired heritage of the middle ages, or
even of ancient times. He would have us
bring mankind up to date.

This proposition calls into question our
whole social system,—our morals, because
our concept of human conduct is the thought
of mind two thousand years ago; our institu-
tion of marriage for the same reason; and
that great problem of sex because such notions
as we have of the biologic relationship between
male and female belong to the cogitations
of the medieval mind that mistakenly regard-
ed sex as something unclean. The author
nowhere says that we should tear down these
established notions and institutions. He is no iconoclast. Neither is he committed to their perpetuation. He says simply that a study of, a scientific approach to, our problems, is what should take place. What may be done afterwards by way of readjustment should be the result of the findings of the truth. If it should result in the destruction of our various theologies, our present form of racial perpetuation, or our system of government, he would contend that it was altogether fitting that this should be so.

The use of intelligence—that is the solution. For, says the author, intelligence is the rarest of human endowments. Man has a mind made up of equal parts of the brute, the savage, and the child. He is naturally hide-bound with physical, moral, and mental inertia. He despises to move; he despises to think so terribly that he refuses almost utterly to think. Whereas, taken by and large, of all the millions of humanity created, scarcely one great mind occurs each century. To their customs, institutions, and habits of thought all men are wedded. Conservatism is deep in the seed of the race.

Wherefore the world wags on, and what was good enough for his daddy for the most part remains good enough for the son. Man has conquered many of the forces of nature, has solved many of the riddles of the universe, but his own mind today remains what it has always been: equal parts of the savage, the brute, and the child.

Harry H. Kroll

A ROYAL ROAD IN NUMBER WORK


This little book proves that number work can be presented in such an easy, natural and delightful way that before one realizes what is happening the child is imbued with a desire to count, measure, divide, and separate into parts as a result of that natural inner urge which teachers are trying to awaken in children today.

Instead of the old way of pouring a few necessary number facts into the child, and drilling constantly until the required amount of work has been covered, this book gives some very delightful experiences in number work developed through various projects and activities of some experimental kindergartens and first grades.

It should be interesting and helpful to all primary teachers. Mary E. Cornell.

OTHER BOOKS OF INTEREST


Mr. Shay includes fifteen one-act plays, one two-act play, and two of five acts: Maeterlinck's "Death of Tintagiles" and Miss Millay's "The Lamp and the Bell."

But to select plays possessed of dramatic intensity and suitable for only women to cast was a problem, because, says the editor, most of such plays were written "for girls' schools, Sunday schools and institutions of like nature. They are neither dramatic nor interesting." This is nevertheless a valuable collection.


Eighteen one-act plays—"wholesome, intelligible, and interesting"—classified as plays of mood and character, dramatic episodes, and plays of fancy. A fresh collection with excellent editorial trimmings, especially thirty-four pages on "Fundamentals of Dramatic Presentation" and a discriminating bibliography.


Recognition of changing usage in language and an infusion of numerous non-grammatical idioms in the study of grammatical rules gives to this textbook for teacher training institutions a special appeal and a definite value.


A direct method textbook complete in itself. The lesson-by-lesson vocabularies are in an appendix with French and English words on the reverse sides of the page.


Four distinct phases of training are recognized by the author: (1) The things one must be able to do, which represent skill; (2) The things one must know, which represent information; (3) The problems one must solve, which represent the calculations one must make; and (4) The practical application of these on real jobs.
NOTES OF THE SCHOOL
AND ITS ALUMNAE

INKLINGS

Marking the beginning of the new quarter, January 3, several faculty changes have become effective. Miss Mary L. Seeger of the Education Department is arranging to do graduate work in Columbia University and leaves here February 1. During the rest of the present session Miss Seeger will be relieved by Miss Carolyn McMullan, of College Park, Georgia. Miss McMullan has a bachelor's degree from the George Peabody College for Teachers and, it so happens, has taught here before as a critic teacher in the Training School. Miss McMullan has also been a member of the faculty of the Farmville State Normal School and of the North Carolina College for Women at Greensboro. Prof. W. B. Varner, a member of the Bridgewater College faculty, is offering a course this quarter in the department of education. Dr. Varner's wife, Bernice Reaney Varner, is the new social director.—Mrs. Parthenia Hancock, who has served as matron since September, resigned to accept a position in Baltimore and has been succeeded by Miss Eunice Lambert, of McGaheysville, a former graduate of Harrisonburg who has recently been teaching at Catlett, Virginia.—Miss Brenda Elliott, third grade teacher in the Keister School, has been added to the Training School faculty.

Mr. G. W. Chappelear, Superintendent of Buildings and Grounds, has been letting no grass grow under his feet. Changes on the campus seem slow only to those who see it every day; an absence of several days makes it easy to realize that a great deal of work is being done. The depression in the southwest corner of the campus adjoining Main Street has long been a special problem and now after four years of intermittent work the hole is filled. Mr. Chappelear calculates that in those years about 250 days of actual time were spent with a force of four men and one pair of horses. About 10,000 wagon loads of earth were hauled. So gratified was Mr. Chappelear at the completion of this job that with great formality and dignity he prevailed on Mr. Duke to load the last shovel of dirt at 5:10 P. M., Tuesday, December 11. In the spring, according to The Breeze's announcement, Mr. Chappelear expects a concrete walk to be built from Ashby Hall to Main Street for the benefit of students living in the Shenandoah Apartments, and from Alumnae Hall to the North Gate for the benefit of students living on Mason Street. These, with the further planting of trees and shrubs and the possible construction of porches for Sheldon and Alumnae Halls, will be noticeable improvements.

The honor list for the first quarter of the present school year recently compiled by the Registrar was announced Friday, January 18. Special distinction went to Edith R. Ward, of Norfolk, and Lila Lee Riddell, of Dumbarton, both of whom received no grade lower than A. Miss Ward is a member of the Post Graduate class, at the same time being an assistant in the Physical Education Department; Miss Riddell is a member of the Degree Class and part time teacher in the Training School. Others on the honor list were: Mary Saunders Tabb, of Portsmouth, primary kindergarten junior; Bessie Ruth Nickell, of Herndon, high school junior; Helen Bernice Yates, of Harrisonburg, high school junior; Ruth Kershaw Wright, of Ocean View, home economics junior; Thelma Louise Eberhart, of Norfolk, primary kindergarten senior; Bertha May McCollum, of Danville, primary kindergarten senior; Barbara Christine Schwarz, of Danville, primary kindergarten senior; Margaret Rose Ritchie, of Petersburg, grammar grade senior; Carolyn Isabel Wine, of Texas, high school senior; Hattie Jacobson, of Portsmouth, home economics senior; Mary Almyra Lacey, of Madison County, home economics senior; Jennie Martha Tomko, of Prince George County, home economics senior; Euphemia Denia Lawrence, of Newport News, postgraduate, and Anna Seaton Cameron, of Newport News, degree student.

Recent additions to The Breeze staff are Nellie Binford, of Richmond, as a reporter representing the Junior Class; Margaret Kneisley, of Woodstock, who has been appointed Assistant Business Manager, and Margaret Leavitt, of Portsmouth, who has been appointed Assistant Editor. All these young ladies happen to be in the primary kindergarten group of juniors.

“The Rabbit Hole,” the senior tea room, which utilizes the old laundry in the rear of
Maury Hall, has proved a most profitable undertaking. Occupying a building to itself, the tea room somehow seems to draw more patronage than it did when it was located in the basement of Harrison Hall. The quaint decorations and the ingenious use to which all the facilities of the laundry room were put when it was converted into a tea room add much to its charm. The afternoon of January 12 there was a silver tea which most of the students and many members of the faculty attended. From the standpoint both of the silver offering received and of the delightful program offered, the afternoon was a complete success.

ALUMNAE NOTES

Evelyn Culton (Mrs. W. C. Newell) writes an interesting letter from her home at Eleven Oaks, Newell, N. C. "I hear from Helen Acton sometimes and learn about the Norfolk girls through her. . . . Margaret (Webb) and her children run out sometimes. She runs her own car and we do have fine times together. Her address is 304 E. Ninth Street (Charlotte, N. C.)."

Lillian Elliot writes from City Point, Va. She says: "I'm teaching in Hopewell again this year, and like my work so much."

Elizabeth Greaves (Mrs. Cecil W. Page) is at home at Shelley, Coke P. O., Gloucester County. She is principal of a two-room school near her home. And she sends best wishes to Alma Mater.

Rosa Tinder, Ruth Current, and a dozen more of our girls are making a creditable showing in Winston-Salem. Three of them Misses Tinder, Josephine Moore, and Anna Allen, are stationed at the splendid new high school, which is one of the finest in the United States. A Harrisonburg Club has been organized and a news report has been promised.

Mary Lee Perry is teaching in a large school near the "City by the Sea." Her address is 100 Chesapeake Avenue, South Norfolk.

Tillie Derflinger Monroe sends a message from Middleburg, in Loudoun County.

Mary Cook Lane now and then gives us a glimpse of Paradise, Brazil. She says, "The U. S. A. mail is a missionary's luxury of luxuries."

Anna Eichelberger is teaching at Chesnee, S. C. Her specialty is English language and literature.

Mary Karnes Brightbill is teaching Buffalo Mountain Mission School, near Willis, in Floyd County.

Myrtle Lewis Ballard is holding a responsible position in the city schools of Charlottesville. Her address is 1201 W. Main Street.

Roselyn Brownley still has a warm place in her heart for Blue Stone Hill. She is specially interested in the progress of "The Breeze." Her address is 703 Berkley Avenue, Norfolk.

Helen Heyl was chairman of a committee that recently reported to the State Teachers Association on a professional code of ethics for Virginia teachers.

Minnis L. Dodd writes from Tye River, where she is in charge of a wide-awake school.

Jennie McIvor is teaching at Naruna, in Campbell County. She wishes to be remembered to all her friends at Harrisonburg.

Eve Dunlop is teaching at Fredericksburg. We get occasional reports of her good work.

Ada Lee Berrey writes from Chucks-tuck. Under date of November 10 she said: "We had a teachers' meeting at Driver today. Miss Gregg was one of the speakers. Dr. Sanger was at the meeting we had in September. . . . My work here is just what I like—nothing but mathematics."

Camilla Hammer is doing good work at Markham, in Fauquier County. She sends us a line now and then.

Bess Willis Shrader lives at Amherst and is teaching near home. She sends best wishes to Blue Stone Hill.

Lillian Rankin Strader is teaching in the high school at Charlottesville. Her address is Box 20, University.

Alice Dickie is teaching in the new high school at Hymon, S. C. She is keeping an eye open to the interests of Harrisonburg in her section.

Mattie Worster's many friends will be pleased to know that she has fully recovered from her hospital operation and is looking better than ever.
Frances Selby, writing from the East Texas State Normal College at Commerce says: “I would like very much to get The Virginia Teacher again to keep in touch with the things concerning Blue Stone Hill... Kate is living in Greenville, S. C., now. She has two beautiful babies and is looking fine—or was in May when I spent a week with her.”

Bessie Lee Jones, now Mrs. Hutchinson, writes from Fairfax and sends interesting news of school people in her vicinity.

Hester Thomas is teaching thirty-four fourth-grade pupils at Culpeper. She is enjoying the work and getting fine results.

Helen Wagstaff is making her mark in the Timberville high school this session. ZELMA is at Bassett, in Henry County. Both of them were at the teachers conferences in Richmond at Thanksgiving. It is always worth a trip to Richmond at Thanksgiving just to see our girls; and this year we saw more than ever—and they seemed to look better than ever.

Frances Mackey is teaching school near her home at Riverside, in Rockbridge County. Elizabeth Lam and Ella Pultz are teaching in the same school.

Here are a few of the marriages that we have happened to learn about. We are sure that many others have taken place since our last record:

September 5, Tita Mae Bland to Mr. Robert C. Mottley, at Roanoke;

October 24, Louise Gibboney to Mr. Chas. D. Lewis, at Richmond;


December 26, Ethel G. Livick to Mr. Walter H. Brown, at Staunton.

Mr. and Mrs. Brown are at home in Harrisonburg; Mr. and Mrs. Lewis live in Pearisburg.

Sometime in October Edmonia Shepperdson married Mr. Robert A. Chermisid. They live at Bolar, in Bath County.

IN MEMORY OF MARIA MURPHY

On October 14 Maria Murphy, whose sunny smile made so many friends at the Normal, died in service at Dawson Springs, Kentucky. After her graduation at Harrisonburg she completed a course in a New York hospital and then entered the service of the U. S. Government as dietitian. After holding responsible positions at different places she took up work at Dawson Springs with the Veterans Bureau. For two years her work there was thoroughly successful and highly appreciated. Her burial took place from St. Francis Church, at her old home in Staunton.

Full military honors were accorded the body of Miss Murphy from the time of death until it left Dawson Springs enroute home. The body rested in state in the nurses’ home at the United States Veterans’ hospital No. 79, and a guard of honor was stationed beside the casket until 10 o’clock Monday morning, when mass was conducted by the Rev. Father O’Hara, post chaplain, in the post chapel. Active and honorary pall bearers were the officers of the post. Taps were sounded and the post flag was at half mast from the time of Miss Murphy’s death until the body was placed on the train.

OUR CONTRIBUTORS

WILLIAM BYRD HARRISON is instructor in mathematics, drawing, and electricity, and supervisor of the electric plant, at the Miller School of Albemarle County, Virginia.

GEORGE WARREN CHAPPELEAR, JR., is instructor in biology and agriculture in the State Teachers College at Harrisonburg.

JAMES C. JOHNSTON is head of the science department at the Harrisonburg State Teachers College. Mr. Johnston has for years been a close student of biography in his spare moments.

HENRY A. CONVERSE is head of the mathematics department at the State Teachers College at Harrisonburg.

BERTHA McCOLLUM will in June complete the two-year primary course in the Harrisonburg State Teachers College.

ELIZABETH COLLINS was last June a graduate of the State Normal School at Harrisonburg, and is now teaching in a junior high school in Suffolk, Virginia.

MADISON GRANT is chairman of the committee on Selective Immigration of the Eugenics Committee of the U. S. A.

HARRY H. KROLL is principal of the high school at Woodburn, Kentucky. Mr. Kroll has been a contributor to various magazines. He is a graduate of the George Peabody College for Teachers, Nashville, Tennessee.

MARY E. CORNELL is principal of the Keister School, Harrisonburg, and member of the training school faculty of the State Teachers College at Harrisonburg.
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Note: On February 13, Governor Trinkle signed Senate Bill 121 which changed the name of the Normal School to that of Teachers College.

**Regular Session 1924-1925**

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