

Pittsburg State University

Pittsburg State University Digital Commons

The Techne, 1917-1937

University Archives

11-1-1918

The Techne, Vol. 1, No. 8: State Manual Training Normal

State Manual Training Normal School

Follow this and additional works at: <https://digitalcommons.pittstate.edu/techne>

Recommended Citation

State Manual Training Normal School, "The Techne, Vol. 1, No. 8: State Manual Training Normal" (1918).
The Techne, 1917-1937. 10.
<https://digitalcommons.pittstate.edu/techne/10>

This Book is brought to you for free and open access by the University Archives at Pittsburg State University Digital Commons. It has been accepted for inclusion in The Techne, 1917-1937 by an authorized administrator of Pittsburg State University Digital Commons. For more information, please contact digitalcommons@pittstate.edu.

THE TECHNE

Life without Labor is a Crime, Labor without Art
and the Amenities of Life is Brutality.—*Ruskin.*



VICTORY!

But We Must Continue to Save and Serve.

"If I buy government securities by giving up the purchase of a pleasure automobile, the government can buy a military truck with the same money, and the labor and capital which would have made the pleasure car for me will make the truck for the army instead. That is the right way." *Pass this on.*

"Now is the time for America to correct unpardonable wastefulness and extravagance."

—PRESIDENT WILSON.

Buy Saving Stamps
Buy Thrift Stamps
AND KEEP BUYING

Do Not Leave Our Boys Stranded Over There

STATE MANUAL TRAINING NORMAL
PITTSBURG, KANSAS

THE TECHNE

PUBLISHED BY THE STATE MANUAL TRAINING NORMAL, PITTSBURG, KANSAS.
A COLLEGE FOR TEACHERS.

VOL. 1.

NOVEMBER, 1918.

No. 8.

CONTENTS.

	PAGE
A Lesson on the Flag.....	3
The Training of Aviation Mechanics.....	4
Put "The War" on Your School Program.....	11
S. M. T. N. War Directory—Second List.....	13
Andrews Goes into Navy	14
Changes in the First List.....	13
Illiteracy at Home	16
A W. S. S. Speech.....	12
How We Can Help.....	10
Book Reviews	15
Let's Get Together.....	16

STAFF.

PRES. W. A. BRANDENBURG, Editor in Chief.

EDITORIAL COMMITTEE.

LYLE BROWER. ERNEST BENNETT. O'DELLA NATION. W. D. ARMENTROUT.

ALUMNI EDITORS.

S. ROY WIDNER. MRS. LENA MARTIN-SMITH. A. B. STEELE.

DIRECTORS.

PRES. W. A. BRANDENBURG. PROF. D. M. BOWEN.
PROF. LYLE BROWER. PROF. G. W. TROUT.
DEAN HATTIE MOORE-MITCHELL. DR. O. P. DELLINGER.

The purposes of this magazine are: To set forth the distinctive work of the State Manual Training Normal; to publish papers that will be of interest to its readers; to assist teachers to keep in touch with the development in their subjects; to foster a spirit of loyalty that will effect united action among the alumni and former students in promoting the best interests of the institution.

Alumni, teachers and friends of the Normal are invited to send communications on such subjects as fall within the scope of the magazine to the committee in charge.

Address communications to The Editor, State Manual Training Normal, Pittsburg, Kan. Issued every month except August and September.

Sent free to all alumni and students of the State Manual Training Normal and to teachers, school officials and citizens on request.

Entered as second-class matter December 13, 1917, at the post office at Pittsburg, Kan., under the act of August 24, 1912.

The editors will welcome suggestions from TECHNE readers. Their desire is to make this little magazine helpful to teachers. Tell us how we can make it of greater service to you. Tell us what YOU want.

A Lesson on the Flag.

Desecration of the flag means to offer it an indignity by diverting it from its sacred purpose or office. All desecrations of the flags are not violations of the flag law, but all violations of the flag law are desecrations.

1. The flag should never touch the ground or be placed lower than a person sitting. Keep Old Glory above your head, both literally and figuratively.

2. The flag should never be dipped or lowered for salute on land. You should salute the flag—not the flag salute you.

3. The flag should never be festooned or draped, but always hung flat. Use bunting for draperies, with red at the top, followed by the white, and lastly the blue.

4. The flag should never be used as a covering for a table, box, platform, etc. It may be used to cover an altar with the blue field at the right as you face the altar, and nothing except the Bible should ever be placed upon it.

5. The flag should never be draped over chairs or benches or placed where it can be easily soiled, and no object or emblem should ever be placed above it.

6. The flag was never intended for a plaything. Children should be taught to regard the flag with reverence.

7. The flag should never be used as an article of wearing apparel or as a whole or part of a costume. As a badge it should be worn over the left breast.

8. When the flag is used in unveiling a statue or monument it should not be allowed to fall to the ground, but raised aloft to wave out and form a distinctive part of the ceremony.

9. International usage forbids the display of the flag of one nation above that of any other with which it is at peace. Such an act is considered an insult in times of peace, and may be followed by a demand for an explanation or an apology. When the national flag is displayed with other flags it should be placed at the right.

10. Old worn-out flags, when no longer fit for display, should not be put to any use which may be viewed as disrespectful to the national colors, but when discarded should be burned privately.

The Training of Aviation Mechanics.

By ERNEST BENNETT.

Schoolmen who are interested in the teaching of the manual arts will be glad to know, it is believed, something of the manner in which the government is training mechanics for the air service. This training is done in two large schools especially set aside for that purpose, one at St. Paul and the other on Kelly Field, near San Antonio. Data that follows was gathered at Kelly Field, but applies in the main to the St. Paul school as well.

The Enlisted Mechanics' Training Department is the name given to Kelly Field school. It is quartered in several large hangars beside one of the flying fields, so that the work done may be given the crucial test of a flight. It is in these hangars that the men who are expected to keep the American air service in Europe at a maximum efficiency are given their technical knowledge and experience.

The training department has four divisions. They are: Aëronautical motors, the airplane, propeller making, and transportation. A mechanic is expected to complete the course in one department only. There are also subdivisions of blacksmithing and motor cycles, to which men are assigned, as to the four main divisions.

A Trades Test Board decides whether a man should be placed in any division of the training department or assigned elsewhere. The recruit generally takes this examination within fifteen days after appearing in camp. However, men who have been in the service for some time may also be admitted to the school upon application and a satisfactory showing before the Trades Test Board.

No rigid rules by which the board shall be governed are laid down. It rests with the judgment of these experts whether a recruit is eligible for the Mechanics' Training Department. However, a candidate must be able to show his aptitude for mechanical work. Generally speaking, it may be said each man admitted was a mechanic in civilian life. But the kinds of mechanical experience the students have had are about as varied as are the possibilities.

The ambitious young mechanic finds the most difficulty in obtaining admission to the section on aëro motors. He must have had two years' shop experience with gas engines, or its equivalent. Men who wish to become propeller makers are subjected to almost as close scrutiny, for only superior workmen can be entrusted with this important task. It is the rule of the board to be especially careful in its choice of men for these two divisions.

Men to be trained for making propellers must know at least something about working in woods. Pattern makers and cabinetmakers are welcomed as good material. They know their tools and can read blue prints—factors that make for a considerable saving in time.

Mechanics for the general airplane division are recruited from among carpenters, sailmakers, tinsmiths, sheet-metal workers, ship riggers, flag-pole experts, etc. The men chosen for transportation have usually been general garage men and employees of motor-car factories, such as chassis

assemblers, final assembly men, transmission experts, axle men, steering-gear experts, etc. Men with a fondness for the motor cycle are apt to be assigned to that department. Only blacksmiths are accepted for the specialized form of smithing that has to be done in the air service.

Chauffeurs of several years' experience and men who were general machinists by trade are found throughout the school, except in the blacksmithing division. The best motor mechanics invariably go to the aëro motor division.

The curriculum in each department is twelve weeks in length. The time is divided between ten weeks in the hangars and two weeks on the flying field as an apprentice member of a crew. The fact is, however, that a large number of the men complete the work in ten weeks. They save two weeks by the speed and efficiency with which they learn the new applications of mechanics put before them in the hangars. The course is outlined expressly to permit this speeding up.

Since the airplane mechanics' course is the most characteristic and enlists a large percentage of the men, it will be described in some detail. It is the aim of the instructors in this department to impart to their men the whole working theory of the airplane in twelve weeks, so that at the end of that time they may be placed in charge of a crew if necessary. However, this qualification must be put upon the statement: the men are expected to know only the outside of the motor. The specialist has to step in whenever there is real engine trouble.

The first two weeks of this course are given, in the main, to woodwork, the woodwork of the wings being studied for the most part the first week, and that of the fuselage, or body of the plane, the second.

The first lesson or two deals with the properties of woods. A set of exercises based on parts of the fuselage are then assigned. Four or five pieces are made during the week. Since these parts are actually used in the repairing of planes, the students learn at once the standard woods and the standard dimensions. Two parts for the wing are also made. The student does a required amount of work on a wing itself, and also learns how to splice the long rods that form the frame of the fuselage and are called longerons.

Lectures intersperse the shop activities. The technical names for the the various parts of the plane are a part of the week's assignment that comes in for attention in the lecture room. To assist in the acquiring of nomenclature, the student has access to a model wing with the names of all parts painted on them.

Sheer skill of hand is called for at the very beginning. Routine operation of a machine is practically eliminated from the whole course. In the first week the student must learn how to knock a wing apart and then put it together again. He has to cut "spacers" in two and then splice the pieces. He has to veneer the "leading edge"—that which cuts into the wind. And when a wing is ready for permanent assemblage the soldier student has to glue and wire its parts into a strong unit. A pretty busy "first week of school," is it not?

The alignment of the fuselage takes a good part of the second week. For convenience of reference, the body is divided into three parts, which are given names. If an aviator, on returning from his morning flight,

reports that his machine refused to go into a tail spin, the mechanic knows at once that the fuselage is probably distorted. It is up to him to find out in what section the trouble lies, and to correct it. This means that he must have learned how to loosen a wire here and tighten one there by the use of turnbuckles, and how to put on a turnbuckle by first threading the wire in a most accurate manner.

Then comes a lesson in patching the linen surface of a wing. Though the women would probably be inclined to classify this as an application of domestic art, the men say it is using a bit of baseball technic. The baseball stitch is used in sewing on the patch, for it is the stitch best calculated to withstand heavy air pressure. To make the work more difficult and more typical, the instructor first sees to it that the rent is frayed on its edges. With the sewing done, a protective covering is glued over the patch and its seams. Unbleached Irish linen is the best material for patching a wing, but it is so expensive that the instructors here make an exception to using the actual material the men later will have to use in service, and substitute a cheaper stuff.

A lesson in propeller alignment is also given at this stage. This part must revolve absolutely true to the line marked out for it. The mechanic must know what this circular line is; how to ascertain whether the propeller follows it; if it does not, why not, and how to correct the defect—as beautiful and practical an application of mathematics as any scientist could wish for.

Metals and wires are the subjects for the third week. Three days are given to each. Topics are: making loops in and soldering hard and soft wires, splicing, making ferrels, adjustment of metal fittings, etc.

The motor is the subject for the fourth week. Although the general airplane mechanic is not expected to be a motor expert, he must know the engine in its relation to the other parts of the plane and be able to remedy the more ordinary troubles. He studies how to install a motor and how to take it out, how to keep carburetor and magneto in working order, how to grind the outer valves, how to make the connections with the pilot's steering gear, and how to crank up. He must get the habit of seeing to it that the propeller, whenever the plane is at rest, stands on a horizontal line in order to avoid warpage.

The rigging of the plane is taught in the fifth and sixth weeks. But 75 percent of the men complete the topic in one week. In the hangars devoted to this work the complete general technic of the airplane is taught. Lectures initiate the men into the principles of *aëro* dynamics and the theory of flight. They are now required to know why as well as how. The charts illustrating these subjects were made in drafting rooms on the field.

At this stage the order of assembling the parts of a plane is learned. This is a definite procedure that must be to the mechanic as his A, B, C's. Alignment in landing gear is also treated here.

The last four weeks in the hangars are devoted to rigging and assembling combined. Three weeks is usually all the time spent at it, however, so that the saving of a week here, combined with the elimination of the sixth week as outlined, often sends the mechanic to the flying field the ninth. The planes which constitute the bulk of the laboratory material

for this stage are knocked down and set up again twice a week during the four weeks. In the closing days of their course the men set up and rig Curtis ships that are afterwards put in flight while the mechanics gaze on the marvel of their handiwork.

The two weeks on the field as a member of a crew do not appear strenuous to an onlooker when he observes the crew lounging about waiting for the pilot to return from a long flight. But he is apt to forget the mechanics arose before daylight to bring the ship out of the hangar and give it its final "once over," and that they will have to work late that night if the flight reveals any serious defect in its mechanism. When these two weeks are finished the graduate is ready for regular service as a squadron member on some American flying field, with a good chance for European service later.

The course for propeller makers is more highly specialized than that just described. In fact, propeller men are specialists in every sense of the word. Besides this, they must possess superior all-round ability. When they are finished off, only one is assigned to each squadron. They have to learn more theory than any other men in the shops. They must know woods, for the kind of wood that makes the best propeller in one climate will not serve in another. In this country, for instance, it is poplar in the South and mahogany in the North. The propeller expert must know how much seasoning to give his wood, just what temperature it must have before being glued, and how to attain that temperature without injuring the wood; then how to glue the several parts together in a press, the manipulation of which is something of a trick. He studies certain charts on the pitch of the propeller, others on its length, and still others showing the combinations of these two factors. He refers hundreds of times to a large chart on the properties of many kinds of woods, their elasticity, weight, strength, etc. And every officer and instructor put over him is himself an expert and can make a better propeller than any enlisted man in the shop.

In the motor-truck school two weeks are given to the study of the engine. The total time is the same as for the other departments. The course is about the same as that in commercial motor schools, except perhaps for its greater intensiveness and rapidity.

In all courses care is taken not to overemphasize theory, while at the same time it is insisted that practice be intelligent. Practice, of course, is accorded the larger share of the time. Everywhere there is a close weeding out of nonessentials.

The grading system is rigorous. A grade sheet for each class is made up every day. There are several ways of checking a student's work. A complete record of grades for the course is kept. Eighty-five percent is the minimum passing grade. An examination is given at the close of each week's work. Men who receive two weekly grades below 85 are required to repeat the work up to the point of the second failure. If this does not straighten out their ideas and practice they are sent back to the Trades Test Board, which is expected to find out what the trouble is, and in case it seems irremediable to assign the man elsewhere. But only five percent of these soldier students are failures.

Corps spirit is not neglected. Officers and instructors aim to imbue

the men with the feeling that they are integral parts of the air service, that branch of the service on which rests so much glamor. They wish them to know that their labors are just as essential as those of the aviator himself. With this end in view, the commanding officers hoped, at the time these notes were made, to be able in the near future to allow each man to make at least one flight. Many of them later, as members of crews, would have this privilege, but to others the opportunity might not come at all.

The government itself holds out a real incentive to these mechanics in the form of a 27 percent increase in their pay at the end of their course. They are given the rating of airplane mechanic or aviation mechanic. To attain these ratings they must pass an examination on airplanes, motors and ignition.

Sergeant of the first class and master signal electrician are further honors that await industry and intelligence above the average. One must have attained the grade of sergeant before being eligible to take the prerequisite examinations. The number of such awards in each squadron is limited.

To be a sergeant of the first class in the air service means something—much more than the layman would suspect. It means the man holding this ranking has passed what some officers assert is the most difficult examination in the army. He must have a good working knowledge of nearly all phases of military practice. The plane, its engine, ignition system, etc., are the very elements of his mental stock. He must know wireless and all forms of signaling, the various lighting systems, photography, the infantry drill regulations, general army regulations, just what clothing equipment a soldier is expected to have, a sergeant major's paper work, etc. All the senior instructors in the E. M. T. D. are sergeants of the first class.

A master signal electrician with an aviation mechanic's rating actually earns more, despite the apparent discrepancy in salaries, than a first lieutenant, and nearly as much as a captain. If it happens that a first lieutenant's meals cost him 50 cents each, his actual income is \$26 less per month. The master signal electrician is expected to have much of the personal qualities demanded of the officer, such as a talent for supervising the work of others and the power to command the respect of his men.

Still another recognition of merit is appointment to the corps of instructors. Even a buck private may be so honored, but once appointed he usually rises rapidly. This, of course, is due to the fact that only superior men are chosen. Besides his technical knowledge, the appointing officers make sure the candidate has the knack of imparting his knowledge to others. Unless this be the case, the man's otherwise high attainments are utilized elsewhere. Instructors are promoted by the merit system only, which system is said to work as a very real incentive.

On September 1 about 180 men wore the white bands on the arm that marked them out as instructors. This number was to be increased shortly to 400, so as to make possible the training of 3,700 mechanics at one time.

The previous training of the officers in charge of such a school as this has its pedagogical bearing. Generalizing, one may say that every man

is highly trained and is a specialist, but no two have had similar sets of experiences. The most of them acquired their specialized knowledge by following some line of business or artisanship that attracted them.

Maj. George E. Stratmeyer, commanding officer, was with the Union Pacific in 1914. Entering the army by way of the infantry, he became a military junior aviator before being given his present appointment. Capt. Edward C. T. McShane, officer in charge of instruction, was a New York motor engineer who afterwards engaged in a general automobile business. But aviation was always his hobby. He had a wide acquaintance among the prewar flyers, and in his eagerness for a flight he once sat on the edge of the wing and held to a spar. Lieut. C. T. Moors, in charge of the aëro motor department, was in the automobile business in San Francisco. The officer in charge of the transportation department, Lieut. L. C. Lichty, was professor of mechanical engineering in the University of Illinois. Lieut. J. F. McCarthy, in charge of the rigging classes, left the employ of a motor-car manufacturing firm to work for an aëroplane company, to which his interest in aëronautics attracted him. From this work he went to the aviation officers' training school at Atlanta. Lieutenant Kelly owned a manufacturing machine shop and was interested in experimental machinery. Lieut. D. C. Cady, commanding the wood, wing and fuselage work, saw nearly every phase of railroad life from the inside. Lieut. H. Robertson, in charge of the propeller-making department, combined the trade of machinist with a genuine talent for song and the roving disposition of a soldier of fortune.

Lieut. F. G. Billker, in charge of metal work, was present at the birth of the United States Air Service. That was when General Pershing took a few wobbly planes along in his pursuit of Villa. Because he had already shown himself to be a "natural-born" mechanic, Mr. Billker was made a member of the First aëro squadron and put in charge of a movable machine shop, of which the entire equipment was carried on one truck. So comparatively unskilled in their art were the flyers that his outfit carried more landing gears than all other equipment put together. Rather curiously, ten of the men who made up the personnel of that traveling machine shop are now captains.

The system according to which the Enlisted Mechanics Training Departments, both at Kelly Field and St. Paul, are operated came from the brain and experience of George E. A. Hallett, who before the war was proprietor of an aviation school at Santiago, in which the mechanics of the airplane were taught. Mr. Hallett has since become a major, and was recently in command of experimental work with the Liberty motor at Dayton, Ohio.

The French government has shown its interest in this unique school system by causing Maj. Henri Dourif, a pilot attached to its organization service, to make a thorough inspection of its workings preliminary to a report to the Paris authorities. "It is simply wonderful," was his comment following his inspection.

A summary of the pedagogical principles and practices illustrated in this school, whose supervisors are not schoolmen, may be permitted. All practice is as directly to the point as possible. Theory is immediately illuminated by practice. Speed is gained through the elimination of pre-

liminaries and nonessentials and through a flexible promotion system; a definite and visible progression; a rigorous grading system, including much emphasis on examinations; substantial incentives; the constant appeal to the eye; analysis precedes synthesis; the hand more important than the machine; interest and the sense of responsibility appealed to; artificial standards for the choice of officers and instructors replaced by the norm of aptitude and pertinent experience; curriculum outlined in detail.

Professor Bennett spent last year at Kelly Field, Fort Worth, Texas, with the Y. M. C. A., as instructor in French. He returned to S. M. T. N. in September of this year, but was called for overseas work the first of November. He is now with the Y. M. C. A. in France.—ED.

How We Can Help.

CHILDREN IN THE ELEMENTARY SCHOOLS CAN ASSIST IN CLOTHING CONSERVATION.

[Prepared by S. DEBORAH HAINES for the Bureau of Education.]

REPAIR AND TAKE CARE OF YOUR CLOTHING.

1. You can darn stockings. An elementary school in Kansas City mended 100 pairs last winter.
 2. You can sew on buttons when they become loose. If you wait until they come off you may lose the button.
 3. You can put a hemmed patch on cotton dresses or on underclothing.
 4. You can mend shoes. In Sacramento, Cal., the boys' cobbling class repair the worn shoes for the pupils and the home. Mending shoes saves a great deal of leather.
 5. You can often make last season's dresses and skirts wearable by lengthening them. How many different ways are there of lengthening dresses and skirts?
 6. You can hang your coat and dresses on hangers when you take them off. This keeps the garment from becoming wrinkled.
 7. You can make a clothes hanger in the woodworking class, or you can make an emergency one out of a heavy roll of newspapers and a string. How would you tie the string in order to have a loop by which to hang it?
 8. You can brush your clothes to keep them free from dust. When is the best time during the day to brush them?
 9. You can keep your shoes dry, or if they become wet you can dry them slowly. Leather can stand no more heat than the hand without injuring it. Quick drying rots the leather and the threads; therefore never dry shoes over the radiator or kitchen stove.
 10. You can keep the leather of your shoes clean and soft by applying a paste made of water and good soap. Good soap such as you use on your hands will not harm leather. Indeed, soap is used to make paste shoe polishes.
 11. You can assist in airing, sunning, and brushing wool clothes and furs next spring when it is time to store them. They should be thoroughly cleaned before storing. Then wrap tightly in newspaper and put something in each package to keep away moths. Label the packages.
- School Life.

Put "The War" on Your School Program.

EDGAR MENDENHALL.

In a meeting of the grade section of the Southeastern Kansas Teachers' Association the writer urged that every teacher in all schools—rural, grade and high schools—put "The War" on their school program. He has urged this in his classes to those who would go out into our schools as teachers.

He is now glad to note that Teachers' Leaflet No. 4, issued recently by the United States Bureau of Education, also urges that this be done. "The general topic of the war," the leaflet states, "and America's part in it should form an *integral* [the italics are mine] part of the course of study in *every* grade of our public school. Incidental instruction on this subject can and should be provided through the opportunities offered by such subjects as American history, European geography, and English composition and literature. If *definite* results are to be obtained, however, our schools must go further and provide for *systematic* instruction in this subject. *Definite periods on the school program should be allotted to this purpose, etc.*"

This valuable pamphlet, obtainable from the Bureau of Education, Washington, D. C., contains an outline for study, discusses methods of teaching, and has a splendid bibliography. This bibliography should be scanned with interest, and every school should not fail to add to its library the helpful material suggested.

Put "The War," or, perhaps better, "The War for World Freedom," on your school program. Let it occupy a definite place, equal in importance to arithmetic, reading, spelling, writing. Indeed, these common-school subjects are of minor importance compared with the ideals for which we wage this conflict. These ideals are the very foundation of our homes and the free atmosphere of our schools. Our free schools will continue possible only if these ideals triumph. Realize this to the depth, all you who read this. Pack these words with a meaning that will stir you to the quick.

Put "The War" on your school program. Plan—plan with care for this war period. Read and study "war material" until you are full of the spirit to overflowing. Enthusiasm is needful for results, and enthusiasm comes from knowledge.

At the recitation period do not cover too much ground. Decide beforehand definitely what should be the point—the object of the recitation—and work to this end. See that what you try to teach goes home into the very souls of your group.

Make your lessons progressive. Link them up with some binding principle or topic. See that they are connected; not presented "hodge-podge." Review frequently important points of previous lessons. Put ginger into these reviews. Make them snappy.

Do not neglect the fundamental principle that your lessons should be suited to the ages and mental development of your pupils. Make the material alive, interesting, appealing. Do not talk too much yourself. Lead your pupils to self-expression.

A helpful device is a bulletin board. Put one up, or have the pupils put one up, in your room. Appoint a committee of pupils to help you look after it and supervise the material to be posted upon it. Encourage pupils to bring suitable clippings, cartoons, maps, etc.

Let not this period be a time used for mental gymnastics alone or for emotional stirrings. Let it be a time when pupils discuss what they are doing themselves in connection with the war—whether they are conserving food, buying thrift stamps, baby bonds, doing Red Cross work—all these should be kept before them.

Repeatedly hold before your group the high ideals expressed in the utterances of our leading statesmen and those of our allies. Place quotations on the board; comment on them; analyze their meaning. Lead them by this constant contact to feel the high spirit that has guided our entrance into this bloody maelstrom. Let not this teaching be spasmodic, but constant. Fill them so full of this spirit that they and generations unborn shall count the public schools as freedom's bulwark.

Since the above paragraphs were penned and put in type an armistice has been signed and peace is in sight; nevertheless the recommendation made still holds good. "The War" still deserves a definite place upon the school program.

A W. S. S. Speech.

Harry Clarence Parker, twelve years old, won the first prize, a war savings certificate, in the four-minute speakers' contest held by the Pittsburg, Kan., schools last May. This is what he said:

The winning of this war does not only depend upon the boys "over there," but you and I must do our bit in the good old U. S. A. The best way we can help win this war is by buying war savings stamps and thrift stamps. There are numerous ways to earn money for these stamps. One is to work after school; another is to save and sacrifice. To keep our men at the front well supplied with food and clothing. We must save and sacrifice all we can. We must give up our candy and shows; every one should have a garden or raise a pig and poultry, and with the money saved buy thrift stamps. When you say, "How can my little twenty-five cents help?" just think how much there would be if every person in the United States were to buy a thrift stamp a week, or month, or even every six months. I am sure it would soon amount to many thousand dollars. Our government has made it very easy for us to save. We can save our pennies and nickles until we get enough to buy a twenty-five-cent stamp. With sixteen of them and a few pennies we can now purchase a war savings stamp. After we have pasted this on a war savings certificate the money we have saved now begins to make money for us, and we have the safest investment we can possibly make, because all of the people and all of the wealth of the whole United States are back of the war savings certificates. Every stamp you lick helps to lick the Kaiser. Therefore, I am sure we will work, we will save, we will sacrifice and we will endure cheerfully to our utmost, as if the whole issue of this great struggle depended upon us alone.

HARRY CLARENCE PARKER, JR.,

Twelve years old, Seventh B, 707 North Joplin street, Central School.

S. M. T. N. War Directory.

(SECOND LIST.)

BAILEY, JAMES, USNA.
 BEHN, PAUL, AEF
 BURKHART, WILLIAM HENRY, USA, Great Lakes.
 BYERS, PAUL V., USNA, Camp Funston.
 DANIEL, CLAYBOURNE ALVIN, USNA, Camp Funston.
 DANNER, WILLIAM T., USNA, Camp Funston.
 DAVIES, EARL EDWARD, USNA, Fort Riley.
 EPPERSON, ALLEN, USNA, Fort Hays, Kan.
 FIECHTEL, THOMAS, USNA, Fort Riley.
 FIKANI, JOHN G., Naval Co. 512.
 FLYNN, TERRANCE A., USNA, Jefferson Barracks.
 HANCOCK, MERLE D., USNA, Camp Funston.
 HAVEY, EARL, USNA, Jefferson Barracks.
 HILCOMB, LEROY F., USNA, Camp Funston.
 HUGHEY, CHAS. W., USNG, 130 FA, AEF
 HUSTON, ROBT. L., USNA, Camp Funston.
 KIEHL, RALPH WALDO; USNA, Jefferson Barracks.
 KOONTZ, ANDREW E., USNA.
 KOOPMAN, WILLIAM M., USMC.
 KUBLER, ERNEST GEORGE, USNA, Fort Riley.
 LEVERY, JOHN, USNA, Camp Funston.
 LINDBERG, ROBT. E., Air Service, Colorado.
 McCALL, PETER, USNA, Fort Riley.
 McGRATH, ERNEST L., USNA, Fort Riley.
 MULVANEX, WARREN OTTO.
 MUNSON, HERBERT C., USNA, Camp Funston.
 MURTY, THOMAS, USNA, Camp Funston.
 OLDHAM, THOMAS J., USNA, Camp Funston.
 PRITCHETT, WILLIAM B., Sgt., 51st Aero Squad, Mitchell
 Field, Hempstead, L. I.
 ROESER, JOHN AEF
 SHAW, WILLIAM WRIGHT, USNA, Camp Funston.
 SIGLER, RICHARD, Medical Corps, Yale University.
 SUTHERLAND, LAURENCE L., USNA, Fort Riley.
 SUTTON, CHARLES RUSSELL, USNA, Camp Funston.
 TAYLOR, CECIL, USNA, Jefferson Barracks.
 TEDLOCK, THURMAN ELISHA, S. Wght, 27 Co., 12th Reg.,
 7th Batt., Camp Paul Jones, Great Lakes, Ill.
 TOWNSEND, GLENN, 140th Depot Brigade, Camp Funston.
 THEIS, JOHN JOSEPH, USNA, Camp Funston.
 WARD, LEWIS J., USNA, Camp Funston.
 WILBORN, THADDEUS BOYD, USNA, Camp Funston.
 WOLFE, JAMES FRANK, AEF
 WOLLESON, LOUIS RAYMOND, USNA, Fort Riley.
 WOODBURY, LESTER L., USNA, Camp Funston.
 YORK, CARL W., USNA, Camp Funston.
 YOUNG, WILLIAM RANKIN, USNA, Fort Riley.

Changes of Location or Position in October List.

DONAGHY, FRED., 1st Lieut., Medical Corps, Yale University.
 CALHOUN, DOYLE, USN, Officers' Training School, Seattle,
 Wash.
 HART, ROBERT, USN, Merchant Marine, Officers' Training
 School, Newport, N. Y.

HERMAN, DAVID, AEF
 HODGSON, OWEN, Co. B, 353d Inf., 89th Div. Corps. Wounded
 in action, August 10, 1918, AEF
 LITTON, GLENN, SATC, 2d Lieut., Golden, Colo., School of
 Mines.
 MATTOX, CLARENCE ERNEST, USN, Officers' Training School,
 Seattle, Wash.
 MOORE, JEWELL E., Co. A, 1st Batt., 1st Reg., 1st USA Corps,
 APO 706 AEF
 NATION, MARION, Base Hospital No. 67, Mesves Bulcy, . . . AEF
 NATION, ROY, USNA. Wounded in action, AEF
 O'DELL, CLAUDE, USNA, AEF
 PLAGENS, OTTO, Co. M, 353 Inf., 89th Div., APO 761, . . . AEF
 PRESTON, WAYNE, Paris, Div. of Research and Inspection,
 Signal Corps, AEF
 ROE, RANDOLPH, A. C. 7. Wounded in action at Chauteau-
 Thierry, AEF
 RULE, HERBERT N., USNG, 130 FA, AEF
 SMITH, G. M., Second Lieut., Coast Artillery, but in training as
 aerial observer, Tours, France, AEF
 WELLINGTON, DALE, Sgt. Amer. Troops, Wareham, Dorset,
 Eng. AEF
 WING, RAYMOND, F. A. N. A., USA, PO 718, Div. L, . . . AEF
 WOOTAN, JOHN, Co. F, 158 Inf. Corps, AEF

"GONE WEST."

NEWMAN, ALBERT, died of Spanish influenza at Great Lakes,
 Sept. 20.
 SCHAUER, WILLIAM, USNA. Died at Camp Funston of
 pneumonia, Oct. 15.

Andrews Goes Into Navy.

From the *Kansas City Journal*.

The Great Lakes Naval Training Station football team landed a star player yesterday when Leroy B. Andrews, of Girard, Kan., for two years left tackle on the Journal's mythical All-Kansas conference football eleven, enlisted in the navy.

Andrews was a star on the Pittsburg Manual Training Normal football team at Pittsburg, Kan., for three years. He played left tackle most of the time, and it was known all over the Kansas conference that the left side of the Pittsburg line was a stone wall when Andrews was in the line-up, and he was always there and ready, because he is a player who seldom gets injured. Andrews tips the beam at about 200 pounds and is nearly six feet tall. The coaches of the Great Lakes team will be glad to get a star of his caliber. Andrews played two years with Homer Johnson, who played half back for the navy team last fall in the game with Camp Funston here.

Shortly after the football season he was married to a normal student. He was in the draft and did not claim exemption. He obtained a release from his draft board at Pittsburg so that he could join the navy.

Book Review.

"Cæsar in Gaul," D'Doge and Eastman. Professor D'Doge, with Prof. Frederick C. Eastman as collaborator, has put on the market a new edition of Cæsar. The title, "Cæsar in Gaul," gives a hint of the novel features and attractiveness of the book. It is written and made so as to arouse real human interest in the ancient narrative and its central figure. Pictures of ancient life and war, including four colored plates, are profusely scattered through the text. A biography of Cæsar in simple Latin smooths the way for more difficult Latin to follow. Forms, syntax and composition are included in the one volume, and all is arranged in the eminently usable manner that marks Professor D'Doge's other textbooks.

"The Rural School Plant," S. A. Challman, enters a field of education that has long needed a more intense cultivation. All phases of the rural-school problem have been too much neglected, and none more than rural-school buildings and grounds. The general attitude has been that "any old thing" would do for the country boy and girl, with the result that they need coaxing to stay at home.

This book seems to cover its field well. Convenience and proper sanitation are guiding principles, but adaptability to modern educational movements and sightliness receive their due attention. The many floor plans of buildings, supplemented by many other illustrations, add value to the book. As the title page points out, it is indeed a book "for rural teachers and school boards, normal schools, teachers' training classes, and rural extension classes."—*Edgar Mendenhall, Dept. Education, S. M. T. N.*

Teach economy. That is one of the first and highest of human virtues. It begins with saving money.—*Abraham Lincoln.*

The purpose of this periodical is to help the teacher in his or her daily work. If it does not do that it is a failure. It is here to serve. Consequently, let the editorial committee know what you need. Don't hesitate to jot down your suggestions and mail them to THE TECHNE, care of the State Manual Training Normal, Pittsburg, Kan. Every effort will be made to fill these pages with reading matter that will be informing and usable.

Tell us how we can serve you.

Illiteracy at Home.

The Secretary of the Interior recently addressed a letter to the chairmen of the senate and house committees on education, from which we take the following:

"At the last census there were in the United States over five and a half million persons above ten years of age who were unable to read or write in any language. Seven hundred thousand men of draft age cannot read or write—cannot sign their names; cannot read posted orders or their manual of arms; cannot understand signals in battle; cannot write home or read letters from home. Illiterates in the United States above twenty years of age equal the whole population of twelve great western states. Of our agricultural population three million seven hundred thousand cannot read a farm paper, an agricultural bulletin, a liberty loan poster, a newspaper, a Bible. Of the total number of illiterates in the country over fifty-eight percent are white, and more than a million and a half—equal to the population of Philadelphia at the last census—are native-born whites. If the average productive power of an illiterate is less by only fifty cents a day than that of a person able to read and write—probably a conservative estimate—the country loses over eight hundred million dollars a year through illiteracy."

Of the number who can read and write in some foreign tongue, but not in English, the secretary does not speak, except to say: "What a commentary upon our educational shortcomings, that in the days of peace we did not teach these men, who have been here long enough to become citizens, the language in which our history and laws are written and in which the commands of defense must now be given!"—*Ex.*

Do not buy Christmas gifts this year. Send messages of greeting, cheer and love.

Let's Get Together.

When you encounter a knotty point or are working against the grain, write to the editors of THE TECHNE and they will be glad to supply the information—if it is possible to do so.

If you wish to receive this magazine regularly, without cost to yourself, mail us your address written on this blank, and your name will be placed on THE TECHNE's mailing list.

Name.....

Address.....

Write your wishes on the other side.