

STUDENTS ARE BEING CALLED UP
 The 28 graduates since 1933, Prof. Ralph U. Blasingame, department head stated, all have found employment.

The records of the nine other departments of the School of Agriculture in placing graduates are almost as good as those already mentioned. In agricultural and biological chemistry, 29 students were graduated in June 1940 and all but four found jobs. Two of the four were physically handicapped and two had low grades. Out of 12 graduates in agricultural economics last year, two probably are unemployed. In agronomy, nine out of 14 found employment but this may not mean that the others are not working, since many agronomy graduates go to work on home farms. Eleven graduates out of a class of 13 in animal husbandry are employed. One of the two not placed is a girl for whom not many jobs exist in this field.

Four of the five graduates in bacteriology were placed. In forestry, the department having the largest enrollment in the whole School of Agriculture, 79 were graduated and of these 64 found jobs.

Last year 50 men were trained in rural education, all of whom obtained teaching positions with the exception of five. No seniors in zoology and entomology were graduated last June.

percentage of its students from homes in which the father is a foreman, manager or superintendent, a merchant, or a farmer, Registrar William S. Hoffman reported today.

These three occupational groups taken together, account for 1313 of Penn. State's graduates are almost as good as those already mentioned. In agricultural and biological chemistry, 29 students were graduated in June 1940 and all but four found jobs. Two of the four were physically handicapped and two had low grades. Out of 12 graduates in agricultural economics last year, two probably are unemployed. In agronomy, nine out of 14 found employment but this may not mean that the others are not working, since many agronomy graduates go to work on home farms. Eleven graduates out of a class of 13 in animal husbandry are employed. One of the two not placed is a girl for whom not many jobs exist in this field.

Four of the five graduates in bacteriology were placed. In forestry, the department having the largest enrollment in the whole School of Agriculture, 79 were graduated and of these 64 found jobs.

Last year 50 men were trained in rural education, all of whom obtained teaching positions with the exception of five. No seniors in zoology and entomology were graduated last June.

showed no desire to exercise. Ad-
 ditions of vitamin B-1 caused the
 beriberi symptoms to disappear,
 and the rats soon returned to nor-
 mal activity. Vitamin B-1 re-
 quirements was proportional to
 the amount of work done. While
 the "forced exercise rats" were
 required to run approximately one
 mile per day, some of the "vol-
 untary exercise rats" have made
 long distance records as high as
 ten miles per day.

These findings are in agreement
 with recent work on human be-
 ings conducted at the Mayo Clin-
 ic. They showed that vitamin B-1
 plays an important role in in-
 creasing endurance and morale
 and in preventing exhaustion dur-
 ing periods of unusual physical
 activity. All of this work adds
 further evidence to prove that vit-
 amin B-1 is necessary for proper
 combustion of body tissues during
 hard work.

Vitamin B-1 is found in rela-
 tively liberal quantities in yeast
 and in foods made from whole
 grains. The problem of supply-
 ing this vitamin to soldiers has
 been solved by some European na-
 tions by adding crystalline vita-
 min B-1 or vitamin rich concen-
 trates to concentrated army ra-
 tions. The chemical name for the
 vitamin is 'thiamin.'

Research funds amounting to
 \$678,535 are being used by the
 various Schools which are doing
 national defense and other speci-
 fic research work during the fiscal
 year 1940, Samuel K. Hostetter, as-
 sistant to the President in charge
 of business and finance announced
 yesterday.

Of the total, \$225,709.52 was
 given to the College for specified
 projects for the federal govern-
 ment. The remainder of the money
 came from the Commonwealth
 funds allotted annually for re-
 search and other private sources.

While the federal government
 requires the expenditure of its
 funds on special projects among
 which defense work is prominent,
 the Pennsylvania government ap-
 propriates an amount of money
 to be used for research work ap-
 proved by the College. The Board
 of Trustees then determines lump
 sums to be used in the different
 Schools.

Private concerns each year bud-
 get funds to the College for spe-
 cial research for the commercial
 advancement.

Insulation Work
 Aids U.S. Defense

In connection with the U. S. de-
 fense program, research labora-
 tories in the School of Engineering
 are still conducting tests started
 two years ago to determine the
 best materials and constructions
 for insulating warships.

Purpose of the experiments is to
 determine the best means of con-
 structing the ships to withstand
 rapid temperature changes. The
 men in the research laboratories
 are also attempting to produce a
 better conditioned atmosphere in
 strategic ship stations to insure
 maximum mental alertness and
 efficiency of the crews.

"The problem has been to de-
 termine the amount of heat trans-
 mission for various ship sections,
 such as decks and bulkheads,
 without insulation and with insul-
 ation of various kinds applied in
 different ways and in several
 thicknesses," Prof. F. George
 Hechler, director of the College's
 engineering experiment station, ex-
 plained.

Several test panels of full size
 and weighing up to 1,200 pounds
 each, representing typical decks
 and bulkheads of destroyers and
 battleships, have been constructed
 to aid in the experiment.

College Students
 Need Word Texts

After conducting research in
 spelling and vocabulary work,
 Prof. Emmett A. Betts, of the read-
 ings clinic, has stated that the re-
 sults show a need for high school
 and college students to use spell-
 ing texts.

The clinic has also made a study
 of a series of 17 spelling texts from
 the grades one to eight, and the
 average number of words found
 to be included in these was 3,700.
 This means that the average col-
 lege student has had actual train-
 ing in spelling only about 4,000
 words. The only word that was
 placed in the same grade was
 "long" in the second grade.

Research work is now being
 carried on to determine the visual
 fitness of college students for the
 carrying on of military jobs.

Timber Research Armed
 At Conserving Forests

Did you know that one half of
 the total area to Pennsylvania is
 still classed as woodland?

Few students realize this fact,
 but the same can not be said of
 research men in the Department
 of Engineering. They are fully
 aware that the forest of today and
 of the future are capable of pro-
 ducing more valuable timber if
 they are used to the greatest ad-
 vantage.

To utilize this material effec-
 tively, and in competition with
 other materials, men in the Col-
 lege's research laboratories have
 devised new and improved meth-
 ods of construction. Such a study
 has been underway for a number
 of years, and already new uses for
 plywood and types of timber con-
 nectors have been found.

How To Care For
 Your Holiday Tree

If a Christmas tree is properly
 cared for, it should last throughout
 the holiday season and should not
 cause any fire danger, says F. T.
 Murphey, professor of forestry ex-
 tension.

Among the trees available, long
 needle pines hold their needles
 best, he said, and fir rank second.
 Hemlocks, cedars, and spruces are
 poorest on this score, but all make
 attractive Christmas trees and, if
 carefully handled, may prove sat-
 isfactory.

A tree drinks through its stem,
 Murphey said. Therefore, to pre-
 vent drying which results in the
 loss of needles, the tree should be
 set either in a pan of water or in
 a bucket of moist sand to which
 moisture may be added when ne-
 cessary. Cut the stem obliquely or
 in a V-shape to keep the cut sur-
 face free of the supporting con-
 tainer.

Phillips Studies
 'Feel' Senses

Remember that side entrance to
 Rec Hall—the place where they
 used to have the anatomy lab?
 Well, they've moved the corpses
 now, and the place has been
 changed into a testing laboratory.

It is here that Bernath E. Phil-
 lips is working for his doctorate
 in Physical Education and Ath-
 letics. He is using 73 students in
 a series of tests to find out the
 "relationship between some phases
 of kinesthetic perception and the
 acquisition of certain sensory
 motor skills," or in other words
 what part "feel" plays in deter-
 mining a person's ability to per-
 form a sport.

The 73 subjects were drawn
 from classes in physical education,
 the only requirement being that
 they had never played any form
 of golf before. After Phillips has
 finished the current battery of
 tests determining their amount of

How To Care For
 Your Holiday Tree

In one method of fire-proofing,
 the moisture in the tree is replaced
 by fire-resistant chemical. "Dis-
 solve a pound of ammonium sul-
 fate in 1 1/2 pints of water for every
 four pounds of tree," Murphey ex-
 plained. "Then pour the solution
 into a tall narrow container and
 stand the tree in it. Keep the tree
 out of direct sunlight and at a
 temperature of 55 to 65 degrees
 Fahrenheit for about four days.

Another way to fire-proof a
 Christmas tree is to spray it with
 sodium silicate solution, common-
 ly called water glass, and allow
 it to dry. The tree's appearance
 will not be changed and the stick-
 iness of this solution will tend to
 make the needles stay on better.
 A thin glue solution also has been
 recommended for holding the
 needles.

Cotton, which often is placed
 around Christmas trees, is easily
 fireproofed. Make a solution of 7
 ounces of borax, 3 ounces of boric
 acid, and 1 1/2 ounces of soap pow-
 der in two quarts of hot water.

College Students
 Need Word Texts

After conducting research in
 spelling and vocabulary work,
 Prof. Emmett A. Betts, of the read-
 ings clinic, has stated that the re-
 sults show a need for high school
 and college students to use spell-
 ing texts.

The clinic has also made a study
 of a series of 17 spelling texts from
 the grades one to eight, and the
 average number of words found
 to be included in these was 3,700.
 This means that the average col-
 lege student has had actual train-
 ing in spelling only about 4,000
 words. The only word that was
 placed in the same grade was
 "long" in the second grade.

Research work is now being
 carried on to determine the visual
 fitness of college students for the
 carrying on of military jobs.

Insulation Work
 Aids U.S. Defense

In connection with the U. S. de-
 fense program, research labora-
 tories in the School of Engineering
 are still conducting tests started
 two years ago to determine the
 best materials and constructions
 for insulating warships.

Purpose of the experiments is to
 determine the best means of con-
 structing the ships to withstand
 rapid temperature changes. The
 men in the research laboratories
 are also attempting to produce a
 better conditioned atmosphere in
 strategic ship stations to insure
 maximum mental alertness and
 efficiency of the crews.

"The problem has been to de-
 termine the amount of heat trans-
 mission for various ship sections,
 such as decks and bulkheads,
 without insulation and with insul-
 ation of various kinds applied in
 different ways and in several
 thicknesses," Prof. F. George
 Hechler, director of the College's
 engineering experiment station, ex-
 plained.

Several test panels of full size
 and weighing up to 1,200 pounds
 each, representing typical decks
 and bulkheads of destroyers and
 battleships, have been constructed
 to aid in the experiment.

Timber Research Armed
 At Conserving Forests

Did you know that one half of
 the total area to Pennsylvania is
 still classed as woodland?

Few students realize this fact,
 but the same can not be said of
 research men in the Department
 of Engineering. They are fully
 aware that the forest of today and
 of the future are capable of pro-
 ducing more valuable timber if
 they are used to the greatest ad-
 vantage.

To utilize this material effec-
 tively, and in competition with
 other materials, men in the Col-
 lege's research laboratories have
 devised new and improved meth-
 ods of construction. Such a study
 has been underway for a number
 of years, and already new uses for
 plywood and types of timber con-
 nectors have been found.

How To Care For
 Your Holiday Tree

If a Christmas tree is properly
 cared for, it should last throughout
 the holiday season and should not
 cause any fire danger, says F. T.
 Murphey, professor of forestry ex-
 tension.

Among the trees available, long
 needle pines hold their needles
 best, he said, and fir rank second.
 Hemlocks, cedars, and spruces are
 poorest on this score, but all make
 attractive Christmas trees and, if
 carefully handled, may prove sat-
 isfactory.

A tree drinks through its stem,
 Murphey said. Therefore, to pre-
 vent drying which results in the
 loss of needles, the tree should be
 set either in a pan of water or in
 a bucket of moist sand to which
 moisture may be added when ne-
 cessary. Cut the stem obliquely or
 in a V-shape to keep the cut sur-
 face free of the supporting con-
 tainer.

Phillips Studies
 'Feel' Senses

Remember that side entrance to
 Rec Hall—the place where they
 used to have the anatomy lab?
 Well, they've moved the corpses
 now, and the place has been
 changed into a testing laboratory.

It is here that Bernath E. Phil-
 lips is working for his doctorate
 in Physical Education and Ath-
 letics. He is using 73 students in
 a series of tests to find out the
 "relationship between some phases
 of kinesthetic perception and the
 acquisition of certain sensory
 motor skills," or in other words
 what part "feel" plays in deter-
 mining a person's ability to per-
 form a sport.

The 73 subjects were drawn
 from classes in physical education,
 the only requirement being that
 they had never played any form
 of golf before. After Phillips has
 finished the current battery of
 tests determining their amount of

How To Care For
 Your Holiday Tree

In one method of fire-proofing,
 the moisture in the tree is replaced
 by fire-resistant chemical. "Dis-
 solve a pound of ammonium sul-
 fate in 1 1/2 pints of water for every
 four pounds of tree," Murphey ex-
 plained. "Then pour the solution
 into a tall narrow container and
 stand the tree in it. Keep the tree
 out of direct sunlight and at a
 temperature of 55 to 65 degrees
 Fahrenheit for about four days.

Another way to fire-proof a
 Christmas tree is to spray it with
 sodium silicate solution, common-
 ly called water glass, and allow
 it to dry. The tree's appearance
 will not be changed and the stick-
 iness of this solution will tend to
 make the needles stay on better.
 A thin glue solution also has been
 recommended for holding the
 needles.

Cotton, which often is placed
 around Christmas trees, is easily
 fireproofed. Make a solution of 7
 ounces of borax, 3 ounces of boric
 acid, and 1 1/2 ounces of soap pow-
 der in two quarts of hot water.

College Students
 Need Word Texts

After conducting research in
 spelling and vocabulary work,
 Prof. Emmett A. Betts, of the read-
 ings clinic, has stated that the re-
 sults show a need for high school
 and college students to use spell-
 ing texts.

The clinic has also made a study
 of a series of 17 spelling texts from
 the grades one to eight, and the
 average number of words found
 to be included in these was 3,700.
 This means that the average col-
 lege student has had actual train-
 ing in spelling only about 4,000
 words. The only word that was
 placed in the same grade was
 "long" in the second grade.

Research work is now being
 carried on to determine the visual
 fitness of college students for the
 carrying on of military jobs.

Insulation Work
 Aids U.S. Defense

In connection with the U. S. de-
 fense program, research labora-
 tories in the School of Engineering
 are still conducting tests started
 two years ago to determine the
 best materials and constructions
 for insulating warships.

Purpose of the experiments is to
 determine the best means of con-
 structing the ships to withstand
 rapid temperature changes. The
 men in the research laboratories
 are also attempting to produce a
 better conditioned atmosphere in
 strategic ship stations to insure
 maximum mental alertness and
 efficiency of the crews.

"The problem has been to de-
 termine the amount of heat trans-
 mission for various ship sections,
 such as decks and bulkheads,
 without insulation and with insul-
 ation of various kinds applied in
 different ways and in several
 thicknesses," Prof. F. George
 Hechler, director of the College's
 engineering experiment station, ex-
 plained.

Several test panels of full size
 and weighing up to 1,200 pounds
 each, representing typical decks
 and bulkheads of destroyers and
 battleships, have been constructed
 to aid in the experiment.