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# WAR PUBLICATIONS

and Reports of the War  
Committee

OF THE

UNIVERSITY OF ILLINOIS

1917-1919



PUBLISHED BY  
THE UNIVERSITY OF ILLINOIS  
1923

## PREFATORY NOTE

The following report of the activities of the War Committee for the year 1918-19 reproduces the texts of the reports submitted by the Committee to President James, on January 7 and June 24, 1919, with the omission of those parts which seem to have less permanent interest.

EVARTS B. GREENE

*Chairman, University War Committee  
September 16, 1918-June 24, 1919*



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T. W. E. L.

UNIVERSITY OF ILLINOIS  
WAR PUBLICATIONS

*Publication*

*Author*

Reports of the War Committee	
Food Conservation <sup>1</sup> .....	ISABEL BEVIER
Municipal War Work.....	R. E. CUSHMAN
Wheat Saving.....	RUTH WHEELER
The War Garden.....	J. W. LLOYD
Food Production.....	EUGENE DAVENPORT
War Legislation.....	R. E. CUSHMAN
War Activities and Moral Leadership.....	E. J. JAMES
Milk.....	RUTH WHEELER
Meat.....	LUCILE WHEELER
Sugar in War Time.....	VIOLA J. ANDERSON
The Great Condition.....	DAVID KINLEY
The German War Code.....	J. W. GARNER
Responsibility for the Great War.....	L. M. LARSON
Report of the War Committee	
The College Man and the War.....	E. J. JAMES
Italy and the Peace Conference.....	P. V. B. JONES
New Arab Kingdom.....	A. T. OLMSTEAD
Territorial Problems of the Baltic Basin.....	L. M. LARSON
The Republic of the Ukraine.....	SIMON LITMAN
Conflict of Parties in the Russian Revolution.....	JACOB ZEITLIN
Asiatic Turkey.....	P. H. NEWELL
The New Poland.....	P. V. B. JONES
Aims and Claims of Germany.....	DAVID KINLEY
Mobilization for Food Production.....	COLLEGE OF AGRICULTURE
Farm Machinery Situation.....	E. A. WHITE
Use of Farm Labor during the War.....	W. F. HANDSCHIN-J. B. ANDREWS

<sup>1</sup>The publications are arranged and listed in chronological order.

*Publication**Author*

Protect the Wheat Crop.....	W. F. HANDSCHIN
Grow More Wheat in Illinois..	W. L. BURLISON and W. F. HANDSCHIN
Home Economics Exhibits....	MINNIE BUNCH and NAOMI NEWBURN
Shall I Plant a Garden?.....	J. W. LLOYD
Simple Seed-Corn Testers.....	AGRICULTURAL EXPERIMENT STATION
Rag Doll Tester for Corn.....	W. L. BURLISON and G. H. DUNGAN
Apple Flakes.....	W. F. JAMES
Shall We Plant More Spring Wheat?.....	W. L. BURLISON
Growing Plants for War Gardens.....	C. E. DURST
Conserving Sugar in Ice Cream.....	H. A. RUEHE
Corn and Corn Products.....	RUTH WHEELER
War Bread Receipts.....	COLLEGE OF AGRICULTURE
Winter Feeding of Idle Farm Horses.....	J. L. EDMONDS
Selection and Storage of Feed Corn..	W. L. BURLISON and E. A. WHITE
War Garden Hotbed.....	C. E. DURST
Applications of Trigonometry.....	A. J. KEMPNER
An Outline of Economic Readjustment.....	M. H. ROBINSON
Political and Social Institutions.....	J. W. GARNER
Historical Background of the Great War.....	L. M. LARSON

## PREFACE

To the University of Illinois, as to other American universities, the entry of the United States into the Great War brought new obligations and new opportunities for service. The largest contributions were doubtless made through individual members of the University — faculty, alumni, and student — who devoted themselves to the great cause in the most varied forms of military and civilian service. On the University Honor Roll of those who died in the service are the names of 181 men. These individual records the University expects to preserve in some appropriate and permanent form.

The University also, through its trustees, president, and faculty, placed its corporate resources at the disposal of the State and Federal governments for war purposes. The careful attention which has always been given here to military instruction gave the University of Illinois a certain advantage in this respect over most other institutions. The technical knowledge and research facilities of certain other departments, notably engineering, medicine, chemistry, agriculture, and household economics, also enabled them to play an important part in the great task of mobilizing the national resources, whether in direct relation to the military and naval service, in such civilian activities as those of the Food, Fuel, and Railway Administrations, or in the auxiliary services of the Red Cross and the various organizations which were finally associated in the United War Work Council. An adequate record of all these things is not yet possible, but a University Committee is already gathering the materials upon which such a record must be based.

A few months after the outbreak of the war, it was decided to organize a University War Committee for the purpose of correlating more effectively the activities of the University in relation to war service, and the material collected in this volume relates largely, tho not exclusively, to the work of that Committee. It includes two reports of the War Committee printed in 1918, together with material from two subsequent reports not previously printed, bringing the narrative down to the date of the Committee's discharge in June, 1917. To these reports are added a number of pamphlets issued by the Committee as a part of its program of civic education. Some of these were intended to give information in popular form on the issues and objects of the war, and the problems of the Peace Conference. Others offered suggestions as to ways and means by which the individual citizen might cooperate more effectively with the Government in conserving and utilizing the economic resources of the country. A few other pamphlets issued by particular officers, departments, or committees, as for instance, the Committee on the War Issues Course, have been added because of their relation to this educational program, even tho they were not strictly publications of the War Committee.

It is needless to add that the collection does not include any of the numerous articles on war topics issued by members of the faculty through official or unofficial agencies outside of the University, such as government publications, and professional journals of various kinds.

Taken as a whole it is hoped that the volume will prove a convenience to future students who may wish to inform themselves on certain phases of University war service.

University of Illinois, September 1, 1920

DAVID KINLEY  
*President*

# REPORT TO THE PRESIDENT

January 7, 1919

*Activities of the University War Committee for the Autumn Quarter, September—December, 1918.*

Under the effective plan of organization developed by Dean Kinley the activities of the university community in relation to the War were, subject to the general supervision of the central War Committee, directed by a number of divisional committees largely composed of members of the faculty but enlisting to a considerable extent also the cooperation of students.

The opening of the current year brought a radical change in the whole University situation and naturally affected the work of the War Committee itself. With the establishment of the Students Army Training Corps, the University administration and teaching staff became virtually a "committee of the whole" for war purposes. A large part of the work of spreading information regarding the War and its issues was taken over by the new Committee on the War Issues Course, since a considerable majority of the student body was registered in the S. A. C. T. for which that course was a requirement. Finally, in the middle of the quarter there came the announcement of the armistice, making unnecessary, or less important, certain previous activities of the committee.

Keeping in mind these changed conditions, I note briefly: (1) work actually done during this period either by the War Committee itself or by agencies more or less connected with it; (2) phases of the work which may profitably be continued during the remainder of the year.

## I. *Actual Service during the First Quarter.*

(1) *War Loan Committee.* This committee under the energetic chairmanship of Professor C. M. Thompson was largely responsible for the remarkable success of the University drive for the Fourth Liberty Loan. No definite quota was assigned to the University, individual members of the University staff and students making their subscriptions for the most part through the same agencies as other citizens. University subscribers were, however, asked to report their subscriptions to the Loan Committee so that a fairly complete record of the University contribution was secured. The following is a summary of the result which is I believe as good a showing as that made by any other University in the country:  
*Chicago Schools and Colleges*

Faculty and Students..... \$ 63,950

### *Urbana Schools and Colleges*

Faculty..... 137,000  
Employees..... 8,900

Girls (Undergraduate and Graduate).....	46,000
Undergraduate Men (Not S. A. T. C.).....	4,000
S. A. T. C.....	29,250
S. M. A. (Officers, Instructors, and Men).....	24,800

*Total*.....\$ 314,000

I wish to call particular attention to the extraordinary showing made by the young women of the University. It seemed desirable to impress upon them as strongly as possible the idea that they, as well as the young men in the military and naval services, should share in the responsibilities and sacrifices which the war involved. Prizes in the form of Liberty Bonds for University women who proved themselves most efficient in this work were placed at the disposal of the committee; but quite aside from this the spirit was admirable and the result is believed to be a quite unique achievement of American University women.

(2) *War Relief Funds.* The chief enterprise of this kind during the quarter has been the drive for the United War Work Fund. In this case the initiative came in large part from the students themselves and at their request I approved on behalf of the University War Committee the organization of a special committee for this drive of which Professor C. M. Thompson agreed to take the chairmanship. The amount finally secured (\$46,821), though slightly less than was hoped for, was nevertheless sufficient to give the University of Illinois a very high rank among the Universities of the country, whether in the proportion of its contribution to the number of students or in the aggregate amount.

During the last days of the quarter the membership campaign of the American Red Cross was also carried through with marked success. The number of memberships secured up to and including January 6, 1919 (the campaign is still in progress) was 1850 and the total amount raised was \$2,040.

To reduce to a minimum the complications inevitably resulting from numerous appeals to the same community, it was voted that the acceptance of a University quota for any war relief fund should be subject to approval by the general War Committee.

(3) *War Employment Committee.* This service under the direction of Assistant Dean Jordan of the College of Engineering was continued during the autumn. The general character of this work was described in Dean Kinley's report of July 13.

(4) *University War Records.* The records of University men in the military and naval services have been kept under the direction of Dean Clark with the cooperation of this committee. By arrangement with the Comptroller a credit of \$500 from the War Committee

appropriation was set aside for this purpose. It is unnecessary to dwell upon the importance of these records as material for the future historian of the University and as sources of inspiration to the coming generation of University men.

(5) *War Memorials.* The Committee has given some thought to the subject of permanent memorials at the University for those of its members who have given their lives in the military and naval services. Ultimate decisions respecting a really adequate memorial naturally lie outside the jurisdiction of an emergency organization like our own. Two steps, however, have been taken looking in this direction: (1) Mr. H. S. Magill, director of the Illinois Centennial Commission suggested that the University might take a certain quota of the Illinois centennial coins (fifty cent pieces coined by the United States mint in recognition of the centennial anniversary of the admission of Illinois into the Union) and sell them to students and others as souvenirs at a charge of one dollar each, using the profits of the transaction either for some specific smaller memorial, such as a bronze tablet, or as the nucleus of a larger fund. With your approval, we agreed to undertake this enterprise and Assistant Dean Warnock was appointed a committee to carry out the plan. It is proposed at present to take 1,000 of these coins, which, if all are sold, will net \$500 for the proposed fund. (2) It has seemed also worth while to initiate a discussion respecting the larger memorial which the University will undoubtedly wish to dedicate to those who have fallen in the Great War. A special committee has been appointed to consider this subject consisting of Dean Kinley, chairman, Dean Clark, Professor J. M. White, and Director G. A. Huff.

(6) *Conservation Activities.* The events of the past quarter have naturally lessened the need for this kind of service. The special Committee on Fuel of which Professor A. C. Willard is chairman prepared a short circular to members of the University staff designed to prevent waste in University buildings. The War Committee cooperated with the county food conservation committee in arranging for an address at the University Auditorium by Mrs. Forbes-Robertson Hale.

(7) *University Lectures on War Topics.* These were necessarily reduced to a minimum because of the influenza epidemic and the reoccupation of faculty and students with the S. A. T. C. The most notable events of this kind were the meetings held in honor of the British and French Missions and the series of lectures given by Lord Charnwood. A special service was held under the auspices of the War Committee on the Sunday after Thanksgiving, to celebrate the signing of the armistice. The exercises consisted of music under the direction of Professor Erb and an address by Professor S. P. Sherman.

(8) *Publications.* One of the most important forms of service undertaken by the Committee last year was the publication of a series of leaflets intended to furnish information for the general public on war issues and problems. A list of these pamphlets is given in Dean Kinley's report of July 13. A considerable part of the distributing and some of the printing were not completed until after that date with the result that over \$2,000 of this expense has been charged to this year's account. These pamphlets have been widely distributed and requests have come from distant states as well as from those in our immediate neighborhood.

After the signing of the armistice it seemed to us that a different type of publication was desirable, dealing with the problems involved in the international settlement. Accordingly a new publication committee was appointed consisting of Professor L. M. Larson, chairman, Professors Ernest Bernbaum, J. W. Garner, Simon Litman, A. T. Olmstead, and Jacob Zeitlin. A partial list of the publications agreed upon for a series of short pamphlets follows: "The New Arabian State," Professor Olmstead; "Constantinople," Professor Olmstead; "The German Colonies," Professor Bernbaum (tentative); "The Russian Situation," Professor Zeitlin; "The Ukraine," Professor Litman; "What to do with Turkey," Professor Newell; "The League of Nations," Professor Greene; "Economic Aspects of Reconstruction," Professor Robinson; "The Present Status of International Law," Professor Garner; "The Jugo-Slavs," Dr. P. V. B. Jones; "The Basin of the Baltic," Professor Larson. A considerable amount of work has already been done upon this series and it is expected that two numbers will be ready for the press in about a week. It is proposed to include in these pamphlets simple non-controversial material on geographic, ethnographic, economic, and political factors in what may be called the "problem areas" of Europe, together with certain other topics likely to be considered by the peace congress.

## II. *Continuation of Existing Service.*

Much of the work above described will not be needed under the changed conditions but some of it will require attention during the winter and spring quarters. The following activities of the Committee seem to come under this latter head:

*The War Loan Service.* The Fifth Liberty Loan has already been announced and there should be some University agency ready to cooperate in securing the fullest possible subscription by the University community: It would be a misfortune to mar the fine record already made by any slackening at the end. The leadership of University men is peculiarly important now in view of the natural tendency of the public to relax after the peculiar strain of war has been removed.



*War Relief Funds.* There is still need for assistance and some supervision not merely to insure liberal giving but also to avoid the irritation which sometimes comes from injudicious methods.

*University War Service Records.* This work will of course be continued in Dean Clark's office but its future financial support is a matter which should doubtless be taken up independently of this Committee.

*Publications.* I hope that it may be possible to carry through the pamphlet series above described.

*Lectures and Conferences on Problems of International Settlement and Reconstruction.* By enlisting the cooperation of members of the faculty we may be able to initiate some helpful discussions even though no considerable amount is available for speakers from the outside, though such a series could be made stronger if some outside assistance could be secured.\*

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\*The remaining paragraphs of the report, dealing with certain matters of detail in connection with the business of the Committee, are omitted. The full report has been filed with the collection of materials in the hands of the Committee on the Participation of the University in the War.

## REPORT TO THE PRESIDENT

June 24, 1919

### *Final Report of the University War Committee, January-June, 1919.*

The activities of the Committee before these dates were covered in Dean Kinley's printed reports of January 7, and August 5, 1918, and my own report of January 7, 1919. As I indicated in the report of January 7, the work of many of our divisional committees practically ended with the signing of the armistice in November. With your approval the work of the Committee has been continued for the purpose of dealing with a few services which are described below.

1. War Loan Committee—The Chief task of this Committee was the organization of the University drive for the Victory Loan. Professor C. M. Thompson having resigned the chairmanship of the Committee, he was succeeded by Professor C. A. Ellis of the Department of Civil Engineering. The work was carried on under obvious difficulties since we lacked some of the stimulus which comes from an actual state of war. Nevertheless, the Committee did its work seriously and effectively with the result that a creditable showing was made. The procedure adopted, as in the case of the Fourth Liberty Loan, was not to take the actual subscriptions in the University, but to ask each person to subscribe at his own bank and report the amount of his subscriptions to the University Committee. The total amount raised in the University was \$86,300, of which the faculty and members of the operating staff contributed \$82,000 and the students \$4,050. The amount is of course much less than that of the Fourth Loan, which reached approximately \$314,000. It should be noted, however, that the former amount included \$63,950 from the Chicago schools and colleges, which were unable to report on the subscriptions taken by their instructors and students in the Victory Loan. Included in the Fourth Loan, also, were \$54,050 taken through the S. A. T. C. and S. M. A. organizations and \$46,100 from the women of the University. The military organizations were not available for the Victory Loan and it was not thought best to canvass the undergraduates closely at this time, in view of the very generous help which the women especially had given to the Fourth Loan. The total for the third, fourth, and fifth loans, which have been conducted under the auspices of this Committee was approximately \$620,300.

II. War Relief Funds—Professor Decker served as chairman of this Committee during the early part of the year, but on his going to Washington Professor W. C. Coffey was appointed to succeed him. The only notable organized effort in this field was that undertaken for the Armenian and Syrian Relief Fund. Mr. Lloyd Morey, the treasurer of this fund, reports that a total of \$2509.36 was raised in the University community.

III. University War Service Records—As I stated in my report of January 7, the War Committee allotted the sum of \$500 for the continuance of this work which was begun last year. I assume that the admirable service which has been given by Dean Clark will be continued and pushed to a conclusion. Dean Clark has made the following statement regarding his work, under date of April 23:

“At your request I am submitting a brief report of the work which I have done as the committee on war records. Early in the history of the war I began to collect all the information I could relative to men who had gone into the service. Later I was appointed by the Council of Administration to do this work. I have sent out a half-dozen or more questionnaires to parents, former students, and men in the service, have started a record for each man, and have kept clippings, photographs, and souvenirs of individual men, and these I have filed alphabetically. I sent out a Christmas letter in 1917 and one in 1918 to all men in the service. I have also sent out postal cards of University scenes to everybody and one or two circular letters. By this means I have been able to gather a good deal of information regarding the men.

This work has cost for the past two years or more probably \$125 a month. If I am to keep it up, it will continue to cost at least \$100 a month. I am of the opinion that it would be far better if the University could engage a man who would give his time to this work and follow up and complete the records of the men whom I have not been able fully to trace.”

Dean Clark has kindly undertaken to prepare a summary of University men in the military and naval services, to accompany this report.

IV. Committee on Publications—This Committee has consisted during the present year of Professor L. M. Larson, Chairman, Professors Bernbaum, Garner, Litman, Olmstead, and Zeitlin. The principal work of the Committee has been the preparation and publication of short leaflets, copies of which have, I believe, been sent to you. The authors and subjects are as follows: P. V. B. Jones, “Italy and the Peace Conference;” A. T. Olmstead, “The New Arab Kingdom and the Fate of the Muslim World;” L. M. Larson, “Territorial Problems of the Baltic Basin;” S. Litman, “The Republic of Ukraine;” J. Zeitlin, “The Conflict of Parties in the Russian Revolution;” F. H. Newell, “Asiatic Turkey, its Problems and Resources;” P. V. B. Jones, “New Poland.” The first two of these were printed in editions of 10,000 each, and the remainder in editions of 5,000 each.

As will be seen from the titles the series was intended to furnish information on some of the problems involved in the international settlement after the war. The treatment was made simple in order

to attract non-expert readers; but pains were taken to secure an accurate and fairminded presentation of facts, rather than mere party pleading. The mailing list included among others the public libraries of the state, and an extended list of superintendents, principals, and teachers; some of the latter have asked for additional copies in quantity for use with their classes.

V. Committee on Lectures and Conferences at the University—This work was under the direction of Professor Bernbaum of the Department of English, who arranged a series of conferences including most of the topics dealt with in the publications above-mentioned. In addition four meetings were devoted to the League of Nations, with formal addresses by Professor Garner and myself, and a round table conference presided over by Professor Bernbaum. At another meeting, Professor Robinson discussed the problems of "Reparation and Indemnities." These conferences began in the Commerce Lecture Room, but the increasing size of the audience made it necessary to transfer them to Morrow Hall; every effort was made to present the topics fairly and to encourage discussion. It is believed that these conferences have constituted a substantial, tho modest, contribution to the important task of helping our young people to take an enlightened view of international problems and their own responsibility as citizens.

VI. University War Memorial—The problem of a University War Memorial is obviously one which belongs to a more permanent organization than the War Committee. It was thought worth while, however, to name a committee to carry on a preliminary discussion of this subject. The original committee consisted of Dean Kinley, Chairman, Dean Clark, Professor White, Director Huff, and Mr. H. B. Johnston, editor of the *Illini*. Dean Kinley withdrew on account of the pressure of other duties and Professor L. H. Provine was named in his place. At the suggestion of Professor Scott, Mr. E. C. Craig of Mattoon was added to the committee to represent the alumni outside of the University. Letters asking for suggestions were sent to the President and Vice-president of the University, the members of the Board of Trustees, the Woman's League, the Student Council of the Illinois Union, several distinguished artists and architects, the faculty, and the administrative staff. The subject was also discussed at a student mass meeting called by the Committee and there were numerous communications in *The Illini*. The students have shown an especially keen interest in the possibility of associating the memorial idea with the proposed Illinois Union Building. There is something to be said, in my opinion, for making such a memorial the central feature of a building which is sure to be frequented by a large number of young men.

Professor Provine reports that the Committee has not been able to reach a definite conclusion as to the character of the memorial and recommends the appointment of a Permanent Memorial Com-

mittee to be composed of loyal alumni to continue the investigation. He adds: "This work cannot be pushed and hasty conclusions drawn; it will take time. Any memorial which is eventually erected should be of the type which will stand the test of ages and forever commemorate the part which the University played in the Great War."

Meantime, he makes the following suggestions regarding a War Museum and the temporary housing of it:

"It seemed to this Memorial Committee that while we were trying to find out the type of permanent memorial which should be erected that a temporary war museum should be started as soon as practicable, and the Memorial Committee was authorized to consider this subject and make recommendations. Under this authority Dean Clark has sent out a great many letters to the Illini asking for museum specimens, and the near future will probably see a generous response to this request. The location of a temporary war museum was considered, and it seems to the Committee that the best place, under the conditions, would be the rotunda (second story) of the University Library. This building is opened to the public at all reasonable hours, is well located on the campus, and the exhibit would have more or less supervision by the library attendants.

. . . . .

This recommendation has my hearty approval.

VII. Publicity—Professor Harrington has been, as heretofore, in charge of the publicity service. His relations with the Illin<sup>1</sup> staff, and with the newspapers of the state through his weekly bulletins and otherwise, have enabled him to render service of the greatest value. Much of the material appearing in the latter was furnished through the War Committee or some one of its various divisions.

VIII. War Employment—This work, in charge of Assistant Dean Jordan, has naturally changed its character since the demobilization process began and has since consisted mainly of trying to help returning soldiers. Mr. Jordan has presented an extended report on this subject to President James.

. . . . .

Acknowledgements—I wish to acknowledge the generous co-operation of all my associates in the Committee and its various divisions. I am especially indebted to the following colleagues: Dean Davenport, for constant support and counsel; Professor Larson, for his oversight of our publications; Professor Bernbaum, for the

organization of the "War Committee Conferences;" Professor C. M. Thompson, for his extraordinarily effective service on the Fourth Liberty Loan and the last Y. M. C. A. drive; Professor H. F. Harrington, for his cheerful and effective cooperation in publicity service. I need not repeat what I have said elsewhere about the importance of Dean Clark's work on the University War Records.

The greater part of the service of this Committee was, of course, performed before I became chairman. Whatever success may have been achieved during the past few months is largely due to the original organization of this work by Dean Kinley and the momentum which he was able to develop last year. I appreciate very much your own hearty cooperation.

Recommendations—I request, first that this report be accepted as the final report of the University War Committee and that the Committee be now discharged. I venture also to offer a few recommendations regarding possible future action of the University more or less related to the emergency service of this Committee. I should add that these recommendations are made on my own responsibility, without opportunity for formal committee action.

1. That as generous provision as possible be made for continuing and pushing to an early conclusion the work of Dean Clark on the University War Records. He is, I understand, willing to keep a general oversight of this work, but he should have a competent assistant to relieve him of the details. I recommend an appropriation of \$2000 for this purpose, to be expended under Dean Clark's direction. It would be regrettable if the University should let slip the opportunity to make this record as nearly complete as may be humanly possible. Ultimately the result should be put in book form.

2. That the University take steps at once toward the compilation of a record of its corporate activities in connection with the war, and of the civilian services of individual members of its faculties. Dean Clark's record is, I understand, confined to individual members of the University and alumni in the military and naval services.

3. That steps be taken to make effective the present interest in a permanent memorial structure for the Illinois men who fell in the Great War, either on the lines indicated in section VI of this report or otherwise, as may seem desirable.

4. That provision be made for binding the series of leaflets issued by the War Committee. I have asked Professor Larson, Professor Windsor, and Mr. Cunningham to serve as a committee to investigate the feasibility of making up fifty or more bound sets of this series. I will ask them to report their conclusions to you.

5. That the Memorial Day exercises be published in some suitable form. There was much in that program which should be of permanent interest to alumni and other friends of the University.

6. That the University consider seriously the reorganization of our employment service, other than that for teachers, taking advantage of suggestions gathered from our experience with the War Employment Service. This seems of special importance for our returning soldiers.

7. That the University, perhaps the University Senate, provide a permanent Committee to plan from year to year (1) a more adequate observance of certain important anniversaries, including one or more especially associated with the late war; (2) a continuance of conferences on civic and international topics, corresponding to those maintained during the past two years by the War Committee. To a certain extent, this would involve an effort to correlate the efforts of the various colleges and departments.

8. That the University consider the possibility of expanding its extension service, so as to include not only the existing work of such departments as Household Economics and Agriculture, but other subjects of civic interest. There are obvious difficulties, but the problem should, I believe, be reconsidered in view of the changed conditions. The efficiency of our War Committee outside the University would certainly have been much greater, if a comprehensive extension service had been ready at hand. We did, of course, profit largely by the extension work of the departments above mentioned.

9. I call attention finally, to the recommendation regarding a War Museum in section VI of this report.

E. B. GREENE, *Chairman*

E. DAVENPORT

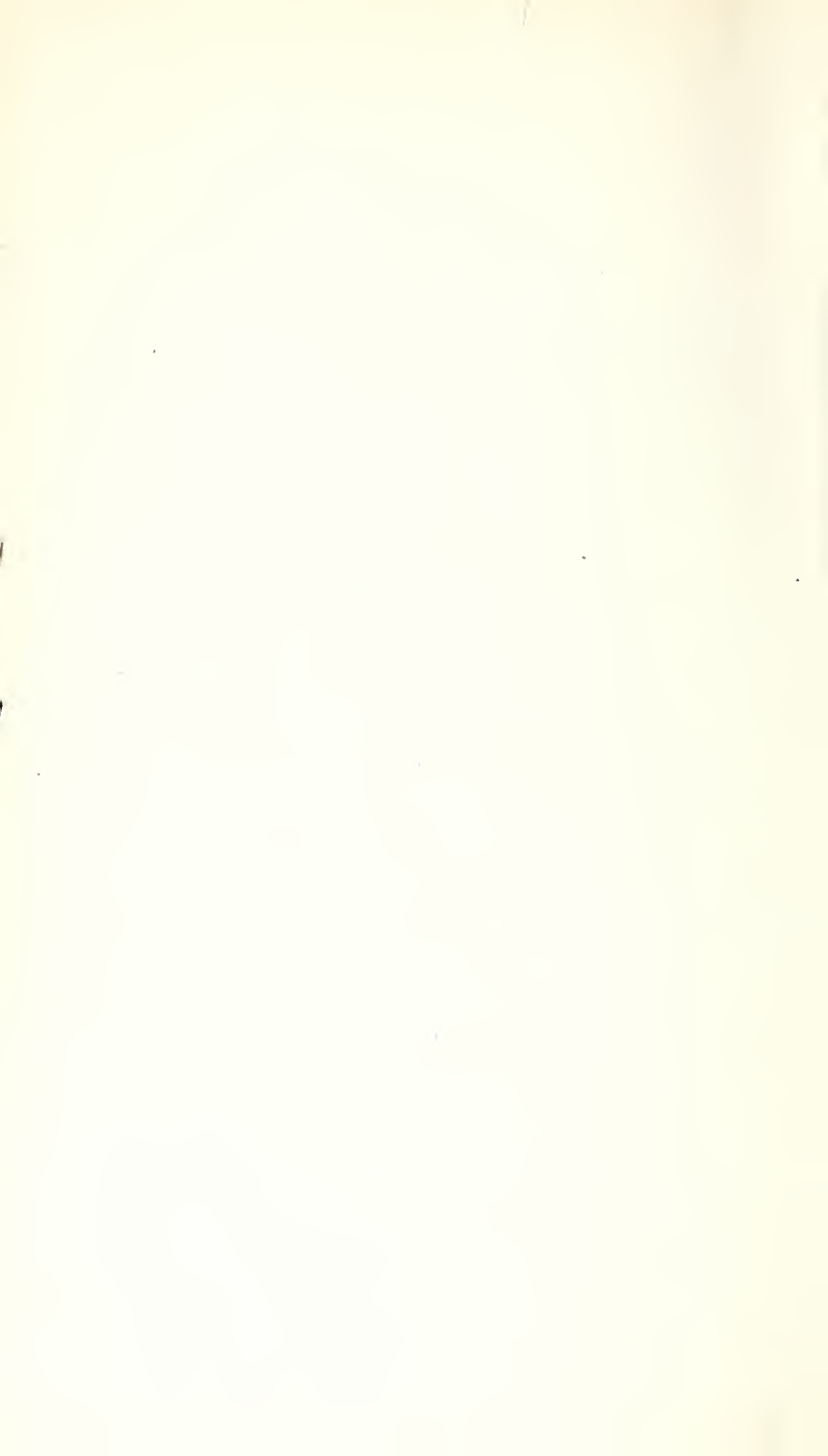
C. A. ELLIS

S. A. FORBES

F. H. NEWELL

C. M. THOMPSON

*Committee for 1918-19*





# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV.

JANUARY 7, 1918

No. 19

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois,  
under the Act of August 24, 1912.]

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## THE WAR COMMITTEE

of the

UNIVERSITY OF ILLINOIS



PUBLISHED BY THE UNIVERSITY OF ILLINOIS  
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A PARTIAL LIST OF THE ACTIVITIES OF  
**THE UNIVERSITY OF ILLINOIS IN THE WAR**

To January, 1918

1. Military drill required of all freshmen and sophomores.
2. Reserve Officers Training Corps at the University.
3. Men of all classes under military instruction about 1400.
4. February, 1917, President offers facilities of University to the President of the United States through the Governor of the State.
5. Loss of students since declaration of war last April, more than 1200.
6. Number of faculty, students and alumni now in the service of their country in the war, 2582, 300 of them now abroad, and also 200 medical and dental students in the enlisted reserve.
7. Illinois men largely in charge of construction of the military camps during the past six months.
8. Classes organized last spring to furnish men to the ordnance and quartermaster's departments, about 120 students enrolled.
9. Red Cross course given completed by 140 students.
10. Ambulance unit sent to France. About \$10,000 in money raised for ambulance support.
11. United States Government Army School of Military Aeronautics at the University.
12. Food conservation. Professor Isabel Bevier spent two months assisting the Food Department in Washington. The extension division of the Household Science Department has organized a food conservation campaign.
13. Belgian Relief. The first service was about two months after the beginning of the war, with a donation of 50 boxes of clothing and \$1500 in cash. Cash raised for Belgian relief \$13625.

14. Syrian and Armenian Relief, \$5928.09.
15. Red Cross subscriptions, approximately \$3800.
16. Y. M. C. A. War fund, \$28,738.
17. College of Agriculture; Advising farmers concerning crops, etc., in the emergency.
18. A number of special investigations of a confidential nature in connection with the war are under way.
19. University Battery now in France.

# THE WAR COMMITTEE OF THE UNIVERSITY

## *Honorary Chairmen*

HON. FRANK O. LOWDEN—Governor of the State.

DR. EDMUND J. JAMES—President of the University.

HON. SAMUEL INSULL—Chairman Illinois State Council of Defense

## *General Committee*

Vice President David Kinley—Chairman

Dean Eugene Davenport

Professor S. A. Forbes

Professor F. H. Newell

Professor S. P. Sherman

Professor C. A. Ellis

Professor C. M. Thompson

The War Committee of the University of Illinois was appointed for these purposes:

1. To give information about the war to the students and faculty of the University.
2. To spread similar information among the people of the state by lectures and articles, and to furnish the press with news items.
3. To publish war leaflets on topics of interest to the people of the state.
4. To coordinate the work of the many organizations and individuals now engaged in different lines of "war work" at the University.
5. To raise and maintain a University service flag.
6. To keep records of the University men and women in the government service, especially in the army and navy.
7. To stimulate in every way interest in military work and in the war.

By authority of the Board of Trustees a general committee of seven was appointed by the President of the University.

This committee organized by selecting three honorary chairmen, who have consented to the use of their names, and by providing divisional committees as follows:

## *Divisional Committees*

[For names of members of committees see pages 9 ff.]

### **1. On the Publication of War Leaflets:**

The duty of this committee is to publish leaflets of from one to

four pages on subjects of importance concerning the war, for distribution in large editions among the people of the state. Pamphlets of larger size may also be printed and distributed occasionally. The committee has four divisions each with its own chairman, as follows: (a) Agriculture; (b) Food; (c) Politics, international law and history; (d) General topics.

## **2. On Publicity:**

The duties of the committee on publicity are to gather and give to the newspapers, through the Associated Press and otherwise, all important items of news about the work of the committees; to secure from members of the faculty articles for publication in periodicals, and in every way to disseminate information on the activities of the committee. The committee has two subdivisions: (a) News; (b) Periodical articles.

## **3. On Talks and Lectures at the University:**

The duty of this committee is to provide short talks and occasional lectures for the University as a whole and for separate groups and organizations therein on subjects connected with the war. A group of sub-committees will be constituted by the members of the committee, consisting of one faculty and one or more student members from the different student organizations. Each of these sub-committees is expected to provide talks for one or more organizations from week to week or month to month.

## **4. On Extension Lectures in the State:**

The duty of the committee is explained by its title. Members of the University faculty on the Farmers' Institute programs will be expected to devote some part of their talks to war topics. Requests for war talks from public schools, teachers' associations and other educational bodies will be supplied as far as possible. The third division of the committee will care for similar requests from Women's Clubs, Commercial Clubs, churches and other organizations and individuals.

## **5. On Funds Collection :**

Beginning January 1, 1918, all individuals or organizations desiring to canvass or to offer entertainments in the University for funds destined for purposes connected with the war, must submit to this committee a request for approval so to canvass. The committee will issue cards of authorization. The committee will give advice as to the best time for soliciting so that campaigns to raise funds for different purposes will

not conflict. The committee may, if it sees fit, initiate a collection campaign for some appropriate war purpose. Authority to perform these services has been given by the Council of Administration.

#### **6. On the University Program :**

The duty of this committee is to study the University class schedule, utilization of rooms, courses offered, etc., with a view to determining whether a more efficient use can be made of our equipment and rooms, whether any condensation of courses offered seems advisable, and whether new short courses bearing on the war may be provided. The committee will make its recommendations or suggestions to the central committee which will then take the matter up with the proper University officers.

#### **7. On United States Savings Certificates and Loans :**

This committee is appointed to arouse interest in and promote the sale of United States savings certificates, liberty bonds and other loans of the Government in connection with the war.

#### **8. On Students' Cooperation :**

The duty of this committee is to bring about cooperation between the faculty and students in all things undertaken at the University with relation to the war.

#### **9. On the University Service Flag :**

The duty of this committee is to provide and raise with appropriate ceremonies, and later to maintain, a University service flag.

#### **10. On University War Service Records :**

Since the beginning of the war the Dean of Men has kept a record of the members of the University, past and present, who have entered or expect to enter the government service in connection with the war. The war committee, realizing that it could make no better provision for carrying on this work simply adopts Dean Clark's staff as its committee on this work. To this Dean Clark has consented. The committee therefore consists of Dean T. A. Clark and his staff on this work.

#### **11. On University War Employment :**

This committee secures information concerning the location, occupation, qualifications and availability for service, of students, faculty and alumni, and keeps in touch with the various government departments so that when individuals are needed for special work we may be able to recommend and place suitable members of the University.

This work, like that described under committee number 10, has been carried on from the beginning of the war, and has been done by the Assistant Dean of the College of Engineering, Dean H. H. Jordan, Chairman.

**12. On Military Organization and Exhibitions.:**

The duty of this committee is to participate in a military way in occasional affairs planned by itself or in connection with the work of other committees.

**13. On Conservation and Economy :**

The duty of this committee is to influence the University community to economize as far as possible in their mode of living, materials consumed, etc. It is believed that the boarding houses, fraternities and sororities can be assisted to a more economical scheme of expenditure, and that there is room for economy in expenditures connected with public functions of the various University organizations.

**14. On Legal Advice to Drafted Men :**

Certain members of the law faculty have been appointed associate members of the Legal Advisory Board, Division No. 1, Champaign County (including Urbana) and also associate members of Legal Advisory Board, Division No. 2, Champaign County (including Champaign) and are listed, with their consent, as one of the divisional war committees.

The Selective Service Regulations issued by President Wilson, November 8, 1917, provide for a classification of drafted men not yet called to the colors in order to determine as to each,—“the place in the military, industrial or agricultural ranks of the nation in which his experience and training can best be made to serve the common good. This project involves an inquiry by the Selective Boards into the domestic, industrial and educational qualifications of nearly ten million men.” For this purpose an elaborate questionnaire has been mailed to the registered men. A Legal Advisory Board, consisting of three members appointed by the President, together with associate members designated by the Boards themselves, is established in each registration locality whose duty is to give advice concerning rights and obligations under the Selective Draft Act and Regulations, and to assist registrants in making full and true answer to the questionnaire. Every registrant is expected, and by some Boards at least required, to confer with a member of an Advisory Board before he writes his answers.



## *Divisional and Sub-Committees*

### 1. *On the Publication of War Leaflets:*

Professor L. M. Larson, *General Chairman*.

- a. Agriculture: Professor J. C. Blair, Professor N. W. Hepburn, Professor C. S. Crandall.
- b. Food: Professor Isabel Bevier, Professor Howard B. Lewis, Professor W. C. Coffey, Professor L. H. Smith, Professor Ruth Wheeler, Miss Lucile Wheeler, Dr. Lorinda Perry.
- c. Politics, International law and History: Professor J. W. Garner, Professor J. A. Fairlie, Professor J. M. Mathews, Professor E. L. Bogart, Professor A. T. Olmstead.
- d. General Topics: Professor H. J. Barton, Professor C. M. Moss, Professor T. E. Oliver.

### 2. *On Publicity:*

Mr. H. F. Harrington, Associate in Journalism, *General Chairman*;  
Mr. Carl Stephens, Professor H. F. Moore, Mr. W. H. Buschman.

- a. News: Mr. K. D. Pulcipher and staff of The Daily Illini.
- b. Periodical Articles: Dr. B. E. Powell, Professor A. S. Pease.

### 3. *On Talks and Lectures at the University:*

Professor Ernest Bernbaum, *General Chairman*; Dean Fanny C. Gates, Dean A. R. Warnock, Professor D. K. Dodge.

### *Sub-Committees:*

The following sub-committees of faculty and students have been appointed to promote interest in the series of war talks that are to be given before student organizations, and will arrange programs therefor:

Social Fraternities: Lew R. Sarrett, chairman; R. E. Foulke, R. C. Haas, C. Fairman.

Sororities and House Units: Miss Clarissa Rinaker, chairman; Rowena Kohl, Lucile Peirson, Beryl Love.

Engineering Societies and Fraternities: Assistant Dean H. H. Jordan, chairman; H. C. Dieserud, D. B. Ohrum, H. E. Kelly, W. E. Bull, Logan Smith.

Agricultural Clubs and Societies: J. H. Checkley, chairman; F. B. Manny, E. A. Bierbaum, W. H. Eichhorn.

Commerce Clubs and Fraternities: Professor H. T. Scovill, chairman; George Salladin, Chester Kreidler, Robert A. Bryant.

L. A. and S. Groups of Societies and Fraternities: Professor Jacob Zeitlin, chairman; R. R. Thompson, McKinley Gardner, E. B. Vliet, P. N. Landis.

Men's Literary Societies, Law and Political Clubs: Professor D. K. Dodge, chairman; G. V. Knight, T. G. Searle, R. H. Antoszewski, J. H. Armstrong, F. H. Fisk.

Musical and Dramatic Interests: Professor J. L. Erb, chairman; F. K. W. Drury, W. C. Langdon, Robert Bryant, C. E. Snell.

Women's Organizations; (except social and religious): Miss Louise Freer, chairman; Francelia Sargent, Iva Newburn, Eunice Badger, Ruth Lieber.

Religious Associations: Dean A. R. Warnock, chairman; R. C. Haas, Jennie E. Barry.

4. *On Extension Lectures in the State:*

Mr. R. E. Hieronymus, *General Chairman*.

- a. Farmers' Institutes: Mr. A. W. Jamison, Miss Mamie Bunch.
- b. Public Schools and other educational bodies: Professor H. G. Paul, Professor H. A. Hollister.
- c. Other bodies: Professor E. C. Hayes.

5. *On Funds Collection:*

Professor E. H. Decker, *General Chairman*; Professor Kenneth McKenzie, Miss Francelia Sargent, President Women's League, Dr. W. L. Burlison, Mr. A. W. Gross, President of the Graduate Club, Mr. Hugh W. Cross.

6. *On the University Program:*

Dean N. A. Weston, *General Chairman*; Assistant Dean H. H. Jordan, Assistant Dean H. V. Canter, Professor W. C. Coffey, Lieut. M. S. Mason, School of Military Aeronautics.

7. *On United States Savings Certificates and Loans:*

Dr. Charles L. Stewart, *General Chairman*; Professor D. F. McFarland, Professor N. C. Brooks.

8. *On Students' Cooperation*:  
Professor J. B. Shaw, *General Chairman*; Dr. G. D. Beal, Miss Ruth Lieber, Mr. R. H. Mallory, Mr. J. W. Dietz, Vice President Illinois Union.
9. *On the University Service Flag*:  
Professor F. H. Newell, *General Chairman*, Professor C. S. Sale, Professor L. H. Provine, Dean A. R. Warnock, Miss Louise Freer.
10. *On University War Service Records*:  
Dean T. A. Clark and staff.
11. *On University War Employment*:  
Dean H. H. Jordan.
12. *On Military Organization and Exhibitions*:  
Major E. W. McCaskey, *General Chairman*, Cadet Col. C. Fairman, Cadet Col. F. C. Kalthoff, Cadet Lt. Col. E. R. Brigham, Cadet Lt. Col. L. E. Yeager.
13. *On Conservation and Economy*:  
Professor Henry B. Ward, *General Chairman*.  
General Committee:  
Professor Henry B. Ward, *Chairman*; Professor Maurice H. Robinson, Professor Arthur C. Willard, Miss M. E. Parsons, Mr. John A. Stevenson.
  - a. Finances of Organizations:  
Professor Maurice H. Robinson, *Chairman*; Mr. A. C. Littleton, M. R. E. Foulke, Mr. G. E. Salladin, Mr. J. L. Klein.
  - b. Coal:  
Professor Arthur C. Willard, *Chairman*; Mr. Russell S. White, Mr. A. D. Halliwell, Mr. L. M. Winters, Mr. L. L. Horen.
  - c. Food:  
Miss M. E. Parsons, *Chairman*; Professor E. A. White, Miss Lillian Woerman, Mr. L. L. Smith.
  - d. Entertainments:  
Mr. John A. Stevenson, *Chairman*; Dr. J. E. Miller, Mr. W. E. Hayne, Miss Helene Doty, Miss Edna C. Vail.
14. *On Legal Advice to Drafted Men*:  
Dean Henry W. Ballantine, *General Chairman*, Professor Charles E. Carpenter, Professor Edward H. Decker, Professor Frederick Green, Professor W. G. Hale, Professor John Norton Pomeroy.



UNIVERSITY OF ILLINOIS BULLETIN  
ISSUED WEEKLY

Vol. XV

JANUARY 28, 1918

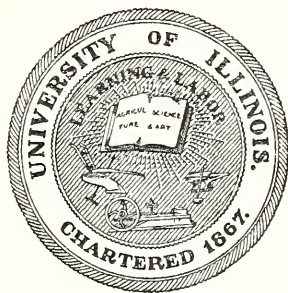
No. 22

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois,  
under the Act of August 24, 1912.]

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PRACTICAL SUGGESTIONS  
FOR FOOD CONSERVATION

Prepared by  
ISABEL BEVIER  
Professor of Household Science



PUBLISHED BY THE UNIVERSITY OF ILLINOIS  
UNDER THE DIRECTION OF THE WAR COMMITTEE  
URBANA

**Women of Illinois: This is your chance for War Service in your Home.  
Serve in your trench as the boys do in theirs.**

## THE PROBLEM

To save certain foods: wheat, beef, pork, fats, sugar.

To encourage a larger use of other kinds of food: fruits, vegetables, fish, fowl, game.

## THE TOOLS

### *Changed Recipes*

You have many good recipes made in the time of peace. Now these must be changed to meet war conditions. Change them by:

1. Using flour from other grains or from potatoes or peanuts, to save wheat. In Illinois, corn is the great wheat saver. Use it all you can.
2. Using vegetable fats, such as corn, cotton seed, and peanut oil, for animal fats.
3. Using corn, maple, or other sirups, honey, and dried fruits in place of sugar.
4. Using fish, fowl, and game instead of beef and pork.

### *Wise Buying*

Wise buying is inexpensive buying! Study these rules for wise buying:

1. **Don't Begin to Save on Milk.**—Children must have it; adults ought to. Milk builds bone and muscle better than any other food.
2. **Spend at least as Much for Milk as for Meat.**—Remember that a quart of milk is equal in food value to a pound of steak. "A quart of milk a day for every child" is a good rule—easy to remember. At least try to provide a quart of milk a day for every member of the family.
3. **Spend at Least as Much for Vegetables and Fruits as for Meat and Fish.**—Fresh vegetables and fruit cannot well be sent abroad to the army; a free use of them makes your family dietary better; if purchased in season and of the sorts grown in your own locality they need not be expensive.
4. **Use Breadstuffs More or Less Freely According to Your Desire for Economy.**—The cereals and breadstuffs are usually the most economical of all foods. The Food Administration does not ask you to use less bread but less wheat in your bread.
5. **Be Sparing in the Use of Meats.**—These are usually the most expensive of the staple foods in proportion to their food value, and are not strictly necessary when a proper amount of milk is used. Meat may be decreased with less harm than any of the other foods mentioned. The amount spent for meat may decrease as the amount for milk increases.

### *Fewer Courses*

Another kind of conservation which saves food, energy, and time is in serving fewer courses. This means less work in prepar-

ation and service; fewer dishes to wash; more time to spend with the family. To get these good results, you must plan your meals carefully. Prepare as many two-course meals as you can. Here are some:

Vegetable soup, nut and cottage cheese loaf.

Potted hominy and beef, fruit salad.

Fish chowder, stewed prunes, spiced oatmeal cakes.

### *Recipes*

#### **Potted Hominy and Beef**

5 cups cooked hominy	¼ pound dried beef
4 potatoes	2 cups milk
2 cups carrots	2 tablespoons fat
1 teaspoon salt	2 tablespoons flour

Melt the fat, stir in the flour, add the cold milk, and mix well. Cook until it thickens. Cut the potatoes and carrots in dice, mix all the materials in a baking dish, and bake for one hour.

#### **Nut and Cottage Cheese Loaf**

1 cup cottage cheese	¼ teaspoon pepper
1 cup nut meats (use those locally grown)	2 tablespoons chopped onion
1 cup stale bread crumbs	1 tablespoon butter substitute, meat drippings or vegetable oils
Juice of ½ lemon	
1 teaspoon salt	

Mix the cheese, ground nuts, crumbs, lemon juice, salt and pepper. Cook the onion in the fat and a little water until tender. Add to the first mixture the onion and sufficient water or meat stock to moisten. Mix well, pour into a baking dish and brown in the oven.

#### **Fish Chowder**

1 onion sliced	2 cups milk
4 tablespoons drippings	1½ pounds fish (fresh, salted or canned)
12 potatoes, peeled and cut in small pieces	⅛ teaspoon pepper
3 tablespoons flour	

Cook the chopped onion with the fat for five minutes. Put fat, onion, and potatoes in kettle and cover with boiling water. Cook until vegetables are tender. Mix the three tablespoons flour with one-half cup of cold milk and stir in the liquid in the pot to thicken. Add the rest of the milk and the fish which has been removed from the bone and cut in small pieces. Cook until the fish is tender, about ten minutes. Serve hot.

Choose food wisely!

Cook it carefully!

Serve it nicely!

## DEPARTMENT OF AGRICULTURE LEAFLETS

Get the leaflets, "Do you know Corn" and "Do you know Oatmeal" from the United States Department of Agriculture, Washington, D. C., or from your Food Administrator, Mr. Harry Wheeler, Conway Building, Chicago.

### PLAY THE GAME

Play the game by saving wheat and fat and increasing the use of potatoes. So shall the women of Illinois greatly increase the food supply of the allies. Remember every yard of material, every pound of food you set free for the Government counts. This is not a choice; it is a duty.

America expects every woman to do her duty in the same spirit as she expects each soldier, when the command comes, to "go over the top" without turning to see if his neighbor has gone first!



# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

FEBRUARY 4, 1918

No. 23

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

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## MUNICIPAL WAR WORK

By

ROBERT EUGENE CUSHMAN, Ph.D

Instructor in Political Science



PUBLISHED BY THE UNIVERSITY OF ILLINOIS  
UNDER THE DIRECTION OF THE WAR COMMITTEE  
URBANA

# MUNICIPAL WAR WORK

ROBERT E. CUSHMAN

*Instructor in Political Science, University of Illinois*

The gigantic task in which America now finds herself engaged is demanding of every individual, organization and governmental unit two things. The first is service, loyal, unstinted, intelligent, efficient. The other is team-work. It is not enough to realize that every resource of property and energy must be put unhesitatingly at the nation's disposal. We must paraphrase Milton's famous line to read "He also serves who keeps from getting in the way," and stand willing to cooperate to the point of individual self-effacement, to coordinate our activities so that friction is avoided, useless duplication of effort is spared, leakage and waste and inefficiency are stopped.

This, then, is the two-fold task of the American municipality in war work—to render cheerfully its utmost service; and to render it in intelligent cooperation with all the other agencies, great and small, which are putting forth their own loyal efforts to the same great end. It is these two aspects of municipal war service which will mark out the two main divisions of this paper.

## I. TYPES OF MUNICIPAL WAR WORK

In the first place, then, what can the American city do to help win the war? Perhaps this question may be most easily answered by stating briefly what the American city has thus far done. Naturally, needs, opportunities and facilities for war service differ widely. They will vary with the size, location, racial problems and industrial conditions of the municipality. The city of 30,000 need not strive to duplicate the war activities of the metropolitan district of New York any more than it should content itself with emulating those of the country village. The following analysis, however, makes an effort to place on exhibition the more important styles and sizes of municipal war work, with the idea that the individual town or city may select those best suited to its own peculiar problems and conditions. These activities may be placed roughly in ten groups, each one of which warrants some little comment.

## 1. *Coordination of Societies and Organizations*

First, there is the task of coordinating the patriotic work of societies and organizations. All kinds of private groups, clubs and associations, social, professional, political, religious, philanthropic and propagandist, are endeavoring to contribute in some degree to the successful prosecution of the war. Sometimes they are trying to do the same thing when there should be a division of labor; sometimes they are attempting different things when their energies and resources should be pooled; sometimes they are seeking to accomplish the same end by a variety of different means. Many municipalities have successfully arranged for a central agency, a local committee or council of defense, in which these agencies may be directly or indirectly represented, and through which their efforts may be coordinated so that the multiplication of overhead expense, the duplication of machinery and the wasting of effort may be largely eliminated. The energies of all the private agencies can thus be marshaled solidly behind a community effort, such as the promotion of the liberty loan, in which concerted action is necessary, while at other times each one can be assigned the particular kind of work which it is best fitted to do. One of the serious problems produced by the war has risen from the repeated, competing, multifarious and sometimes ill-advised campaigns undertaken in so many cities by self-authorized persons or groups for the raising of money. One or two states have felt obliged to deal rather drastically with this problem, and passed legislation making it illegal to solicit war funds of any nature without first securing a permit from the state council of defense. It is believed that such stringent action would be unnecessary if in cities as well as in counties and states the patriotic activities of societies and organizations were coordinated by the creation of some central agency which could act as a sort of clearing house and directing force.

## 2. *Publicity and Education*

In the second place municipalities can make themselves most efficient agencies of publicity and education on matters relating to the war and its problems. Its work in this direction may be either direct or indirect. To begin with, the city may, of course, pay for such advertising facilities as are necessary for its work and which it

cannot secure free of charge. But many existing agencies and instrumentalities may be turned to account for this purpose without greater expense. Streets and public places may be utilized for purpose of display, parade or demonstration, public buildings may be used for mass meetings, the schools may be utilized as a means of reaching parents as well as children. Churches, clubs, theatres and newspapers are usually willing to cooperate in providing effective means of publicity, if the city will call upon such agencies and tell them what to do. It is unnecessary to discuss or even fully to enumerate the kinds of propaganda which the city might well further through the various means just mentioned. Whether it be helping Uncle Sam to recruit men for the army or navy, or persuading its citizens to buy a bond, or raise potatoes, or cut the loaf at the table, the municipality may render exceedingly valuable service to the nation by acting upon the principle that it pays to advertise.

### 3. *The Mobilization of Municipal Property and Labor*

In the third place, the city may place at the disposal of the national interest such municipal property and such time and energy of municipal officers or employees as may be so utilized without prejudice to the work and welfare of the city. Cities have only begun to realize, for example, how useful the public schools may be made for war service. As agencies of publicity they have already been mentioned. Municipalities here and there have found that school buildings are conveniently located and well equipped for meeting places after school hours, for various patriotic gatherings, that they can be effectively utilized for headquarters for registration or draft, for administering relief, for assembling and dispatching war material or for the conducting of work among aliens. School gymnasiums, playgrounds and parks have been put at the disposal of organizations, official or private, who have wished facilities for military instruction and drill. Other public buildings have been made available in like manner. Vacant land owned by the city has been thrown open for the cultivation of war gardens. Not only have buildings and property been enlisted in war service, but the municipality has in some instances set its officers and employees at work to the same end. With careful planning several kinds of work may be turned over to the police department without perceptibly interfering with

the efficiency of that organization. The officer on the beat is frequently in a position to secure information, make inquiries and investigate conditions much more easily than any one else. The invaluable service rendered by the police of New York City during the hard times of three years ago in helping to cope with the problem of unemployment is illustrative of what may be done along this line. There is no reason why the police officer in these war times should not secure data regarding unemployment, destitution, location of aliens and many other matters about which the municipality ought to keep itself informed. In short, if our cities were to make a careful inventory of their present resources and use their imaginations and ingenuity, they would be astonished at the extent of the war service they could render with very little expense merely by this effective mobilization of their property and the spare time of their public service servants.

#### 4. *Employment and the Labor Supply*

A fourth form of war service open to the municipality relates to labor and employment. If there ever was a time in the history of the country when there was no excuse for idleness, now is that time. And yet the problem of bringing together the man who can do the work and the job that needs to be done is not an easy one. One of the most common forms of municipal, county and state war activity has been that of trying to solve this problem of the distribution of labor. A free employment agency constantly endeavoring to keep in touch with men available for work in war industries or on the farms renders invaluable service when cooperating with those state or national agencies which are attempting to place most advantageously every available unit of labor. Such an employment bureau or labor exchange can also keep a register of the persons who are willing to volunteer for various forms of war service and act as a medium between them and those who can effectively direct their patriotic efforts.

#### 5. *Relief—Charities—Health*

In the fifth place, an important work can be done by our cities in the dispensing of needed relief, the administration of charity and the safeguarding of public health. First of all, the families of the men who are in the army and navy will frequently need at least

temporary assistance until the national government can apply a permanent policy for their relief. Even more frequently will they need comfort and advice and guidance. Surely the city can do no more useful work and discharge no higher obligation than in rendering such aid as it can to these people. Many of the problems incident to the ordinary administration of public charity become more complex and acute under the stress of war and will call for special exertions and high efficiency on the part of the city. And, finally, at a time when the staying power of the nation is more than ever before dependent upon the physical vigor of its citizens and at a time when many of the common restraints and precautions are in danger of being forgotten, the municipality must put forth unusual efforts to see that existing health regulations are rigidly enforced and new measures taken to meet emergencies which may arise.

#### 6. *Work among Aliens*

A sixth and most important type of war service may be rendered by many cities in dealing with aliens and the problems which their presence in our midst creates. The acuteness and complexity of this problem will vary greatly from place to place. In cities where aliens are numerous at least three forms of work may well be undertaken under the direction of the municipal authorities. First, we note certain protective measures which may be taken to forestall or check depredations or injurious propaganda carried on by enemy aliens. Of course, the national government is the authority which must deal with the cases of treason, espionage and sedition. The city may render valuable aid, however, by securing through its police or other agencies as accurate information as possible, relating to the presence of enemy aliens or the existence of suspicious circumstances. Should it seem desirable to require a nation-wide or state-wide registration of aliens the cities would naturally undertake the task of doing that work or helping with it within their own limits.

Secondly, either directly or by coordinating the work of other agencies, the city may help along the Americanization of aliens. Suggestions, information, advice and encouragement are frequently needed by the foreigner who wishes to become naturalized. With the enormous increase in the number of applicants for citizenship, the need has also increased for agencies which will help the alien

through the complexities of the naturalization process, and many municipalities whose foreign-born population is large, have rendered efficient service in this direction.

Thirdly, some cities have established bureaus for the purpose of bringing about among the foreign-born—be they naturalized or not—a greater feeling of loyalty for the government and of giving them an opportunity to air their grievances and understand more fully why sacrifices and burdens are required of them. It has been true, in many cases, that the most absurd and erroneous ideas regarding conscription have prevailed among relatives of drafted men of foreign birth many of whom do not understand English. These ridiculous impressions turn the potential patriot into the bitterest malcontent. To the shame of some communities, peaceful and law-abiding German or Austrian citizens have been subjected to wholly unwarranted abuse and discrimination by persons to whom all Germans look alike; and these bureaus have been able to adjust many such difficulties and preserve the loyalty of the man who is trying his best to adjust himself to the bitter fact of war between the country of his birth and the country of his adoption. The problem of the alien in time of war has vexed the nations of Europe and is vexing us. It must be met with firmness, justice and tact. A municipality may do much in a broadminded and sensible way to keep that problem from becoming acute within its limits.

### *7. Food Production and Conservation*

In the seventh place, no more valuable work has been done by American municipalities than that designed to promote the production of food and its conservation. In the spring of this year, at the suggestion of Mr. Hoover and others, a very large number of our cities threw themselves wholeheartedly into the campaign for war garden and vacant lot cultivation. The ways in which municipalities aided in this work were multifarious indeed. It has already been mentioned that unused land owned by the city was thrown open to cultivation. In other cases the city either rented vacant land for gardens, or lent its support to secure the donation of the use of such lands. Some cities hired tractors to plow and harrow free of cost the lands which could not otherwise be made ready for planting, and in a few instances workhouse labor was employed for the purpose. Seeds were supplied at cost or even less, and water was sometimes

supplied at half price for garden use. All the agencies of publicity at the city's disposal were put into play not only to persuade people to raise vegetables who had never done so before, but to put at their disposal expert advice, demonstration and assistance to enable them to carry out their good intentions. It is unnecessary to go further into detail regarding a matter so familiar to us all. It is enough to say that, largely due to the aid rendered directly or indirectly by the cities, the national food supply for 1917 was substantially increased, while the tired business man or laborer found in hoeing beans and potatoes his favorite outdoor sport. Similar efforts were made to aid the national movement for food conservation. Through the schools and other agencies municipalities helped the food administration by urging upon housekeepers the desirability of preserving and canning perishable products, and of conserving the supplies needed to feed the armies in the field.

#### 8. *Distribution and Marketing of Food*

The problem of food production and conservation suggests the related work which forms the eighth type of municipal war activity, namely, the work of helping in the marketing and distribution of food. This is a problem which we have not solved and to which the energies and ingenuity of city, state and nation will have to be applied. Some of the municipal efforts to cope with it are, however, worthy of mention. Some cities substantially increased their marketing facilities by putting at the disposal of farmers and producers municipal property, under adequate regulation, for market purposes. In this way the producer and consumer were brought closer together to their mutual benefit. A few cities have adopted plans contemplating the establishment of what have been called "glut" markets, in which consumers who desire to purchase produce in large quantities for preserving or canning may do so at wholesale rates. It seems clear that in the future the American city is going to be called upon to face more directly and intelligently the problem of the distribution of the food supply.

#### 9. *Transportation Facilities*

A ninth form of war service which municipalities may render relates to the means of transportation. This is a problem which, of course, concerns more those cities or towns which are under the necessity of providing facilities for handling troops or war supplies.



But there is no municipality which can afford to practice the false economy which would permit streets or roads or other transportation facilities to deteriorate. The avenues of traffic throughout the country should be kept efficient. Municipalities which, by reason of their location, become the centers for mobilization of troops or war supplies have taken more constructive measures to provide means of transportation. Registers have been made up of the owners of automobiles and other vehicles which could, in time of emergency, be placed at the service of the military department. Automobile squadrons have, in some cases, been organized out of those who are willing to serve in this way. There are many things which cities may do to aid in the prompt and efficient movement of soldiers and supplies.

#### 10. *Home Defense and Law Enforcement*

It remains to consider the efforts made by many cities to secure adequate home defense and effective law enforcement. Once more the individual city will find its activities determined by its size, location, racial characteristics and other considerations. Ever since the dawn of history when armies have gone forth to war the duty of protecting the forsaken walls and firesides has devolved upon those who, by reason of age or other disabilities, were not called into the active service in the ranks. Many American municipalities are facing just that problem. The result has been the organization in many places of home guards made up of men who are not liable to federal service. These home guards are organized and drilled at such times as render unnecessary their withdrawal from their customary occupations. They are a sort of emergency police force or posse comitatus, available for the suppression of riots, disturbances or insurrections, and the guarding of strategic points such as bridges, tunnels, water supplies or cargoes of munitions or food. In some instances, as in New York and other metropolitan centers, they have been made adjuncts of the police force; but in other cases, their organization has been independent. Another measure for home defense has been the mobilizing and training of the police and fire departments for distinct war service. This has been done in several ways. By the organizing of police and fire reserves composed either of those not in active service who have had experience or of men who are applicants for positions in those departments, the effectiveness of the police and fire protection work has been well nigh doubled

in some cases. The work of the two departments has been coordinated. The fire department has been trained to render "riot service" on the belief that a powerful stream of water is frequently as efficacious in dispersing an irresponsible mob as is the machine gun, and does the work with less danger to human life. The prevalence of incendiary fires has led a few municipalities to give the power to arrest to firemen so that suspicious characters at the scene of conflagration may be apprehended with the least possible delay. Stricter ordinances have been passed to control the possession and use of explosives; contractors, for example, being compelled to keep their stores of dynamite at night under the protection of armed guards.

A vigorous, steady and just enforcement of the law is a great preventive of crime and disorder. It is needed now as never before. Cooperation with the federal authorities for the discovery and suppression of sedition, treason and sabotage is the duty of every municipality. Throughout the country and especially near the military encampments every available means should be employed for the stamping out of the evils of vice and intoxication. No efforts made by the national government for the control of the moral conditions surrounding the army posts can be so effective as to render unnecessary all the help which the administrations of nearby municipalities can render. In short, in all these matters, no matter what the state or nation may attempt to do, on the city itself must rest a very large measure of responsibility for adequate home defense and protection, effective law enforcement and vice control.

Before leaving our discussion of the kinds of war work which municipalities have in the past, or may in the future undertake, it may be well to suggest that now, if never before, the American city must realize the necessity of subjecting every enterprise and activity to the most rigid tests of efficiency and economy. This is no time for slipshod work, partisan patronage, careless accounting and extravagance. In the city, as everywhere, retrenchment is the slogan. Waste is no longer merely foolish—it has become criminal. This does not mean that there must be a sharp reduction in the expenditures for necessary public work and the ordinary municipal undertakings. Municipal economy is sometimes to be judged perhaps not so much by the purposes for which the public funds are spent as by the value received for that expenditure. One of the luxuries which the American municipality must forego, as a war measure, if for no other reason,

is the luxury of paying its officers, its laborers, its contractors, the firm from which it purchases supplies, more than it receives in services or goods.

## II. COOPERATION IN MUNICIPAL WAR WORK

The kinds of work which municipalities have found it possible to do to help win the war have been discussed, perhaps at too great length. It remains to consider briefly the methods by which municipal war work may be coordinated with that of county, state or nation. What demands are made upon the city in the way of cooperation?

There are two phases to this problem of cooperation. There is first the problem of cooperative organization and there is second the problem of division of labor.

### 1. *Cooperative Organization*

In the first place, then, how should municipal war work be organized and how should that organization be connected with the county, state, or national councils of defense?

There is no hard and fast form of organization. The usual plan has been to appoint a council, nonpolitical in character, composed of men who enjoy the public confidence and who will give their services in an advisory capacity. Certain city officials may be members ex officio of that body, and frequently the problem of coordinating the war activities of private clubs or associations has been solved by making the heads of such organizations members of the municipal council of defense. This central council will serve as a general advisory and directing agency for the purpose of outlining and coordinating the work of the committees which it organizes to take charge of the special kinds of work in which it seems desirable to engage. It is assumed that all of the persons appointed to the municipal council of defense or its committees will serve without compensation. The city itself will probably pay the necessary expenses, although in some cases private generosity may make even this unnecessary. This scheme of organization is susceptible of many modifications and may be made as complex or as simple as local problems render desirable.

Assuming that the city has a satisfactory board or council organized which may direct its war activities, the manner in which it

can bring itself into working relations with the forces of the state and nation will depend largely upon the way in which the state is organized for war service. Practically every state in the Union has organized a state council of defense to cooperate with the National Council of Defense.

The relationship between the municipal defense councils and the state councils of defense is in general of two distinct types. First there are states in which there is direct connection between the state council and that of the city, without the aid of any intermediate agency. Second, there are states in which the local unit for war work is the county, and the municipality is regarded as an administrative subdivision of the county.

Turning first to those states in which the cities cooperate directly with the state councils of defense we find considerable variation as to the scheme of organization. In the first place there are states in which the state council has been made large enough to include among its members, either active or advisory, the mayors of all the important towns and cities. In these cases, the mayors serving on the state council have naturally been able to direct more wisely the activities in their own cities. In the second place the direct cooperation of municipalities with the state council has been asked and received even when the county or township was the regular local unit for war work. In Iowa and New York, at least, direct appeals for assistance have been made to the mayors of cities. In Louisiana and Iowa the president of the municipal league of the state is a member of the state council of defense and, though in neither case does he hold that office *ex officio*, an additional channel of communication is thus opened up between the state and municipality. In the third place, there is the quite unique type of organization of war service in New Jersey. In that state all war activities are placed under the control of the adjutant general's office with which is associated a committee of public safety, composed exclusively of the mayors of the state and working through a small executive committee. While many states have councils of defense in which the officers of important cities have places, this seems to be the only instance in which the state council is composed only of city officials and on which no other subdivisions, interests and organizations are given representation.

Much more numerous, however, than these instances of direct

cooperation between city and state are the cases where the county or township is made the unit for local war service. This county form of organization has very generally commended itself to state defense authorities because it covers the entire geographical area of the state and brings both urban and rural districts alike into touch with the central agency.

The relation between the municipality and these county councils of defense differs from state to state. In a few cases the city organization will supersede that of the county. In New York City, for example, the mayor's committee on national defense controls the war activities of the five counties comprising Greater New York. In other cases where cities are important but do not swallow up the county they are given ample representation on the county councils of defense and may even dominate its policy though they do not exercise independent power. In many of the primarily rural middle western counties, however, the county council will itself control the war work for that district through the agencies of committees in towns or villages or in some cases by its own direct action. In the state of Texas the existence of the city is being ignored and a plan is on foot to organize, under the direction of the county councils of defense, subcommittees in every voting precinct in the county.

The foregoing analysis indicates how many possibilities there are in the way of organizing the war work of a state and giving the municipality a place in that general program of patriotic endeavor. Thus far the Illinois state council of defense seems not to have adopted any definite scheme of local organization. Should it decide to do so the probabilities are that the county would be made the local unit as such a plan would seem to be necessary to reach effectively all the districts in a state so largely rural. But it is hardly conceivable that any plan of organizing the war resources of the state would fail to avail itself of the services of such effective councils of defense as might be operating in the towns and cities of the state. Whether Illinois municipalities are asked to coordinate their patriotic efforts with those of a county organization or a state organization is a matter of small importance so long as they work loyally and cooperate intelligently and wholeheartedly.

## *2. Division of Labor*

It has already been noted that while cooperation in war work

demands efficient organization to that end, it also calls for division of labor between the cooperating agencies. Viewed from this standpoint of effective division of labor, the kinds of war service which municipalities may from time to time consider undertaking will fall into three distinct categories. First, there is work which the city alone should undertake or which it can effectively do independently. Second, there are tasks which the city must do in conjunction with the county or state organizations. And third, there are things which the city should not undertake at all but leave to the state or nation.

The war work which the city can most effectively do alone is that, of course, which relates to its own local problems or conditions, the assumption of its own unique responsibilities and obligations. By far the largest part of the service, however, which the municipality can render will fall in the second class of undertakings, in the doing of which it must work in effective cooperation with other agencies doing that task, or part of a task, in which it can best serve the great common end. Finally, there are a few sorts of municipal war work, entered upon with the best intentions and the highest motives which are rather generally admitted to be ill-advised. The Council of National Defense has urgently requested local defense organizations to postpone the adoption of any comprehensive plans for the permanent relief of soldiers or their dependents until the policy of the national government in regard to that matter shall have been worked out. The commandeering of supplies of food and coal and the fixing of prices should be done in accord with policies formulated to meet national or state rather than municipal conditions; and there have been some recent cases in which well-meaning mayors and sheriffs have found themselves within the grip of the federal law because of their unauthorized seizure of supplies intended by the national authorities for other places and purposes. Finally, one cannot too severely condemn the occasional acts of a few municipalities whose authorities in their misguided zeal sought to serve their country by taking the law into their own hands. The brand of patriotism which confiscates land or the use of land for war gardens without paying for it, compels a man to buy a liberty bond under threat of bodily harm or imprisonment, or in any other way violates the constitutional rights of the law-abiding citizen, even though his patriotic ardor be somewhat cooler than it ought to be, that brand

of patriotism closely resembles the brand of justice dealt out by the mob in accordance with the uncivilized code of lynch-law. No municipality can afford so seriously to injure the great cause which it is trying to serve.

Before embarking upon any form of patriotic endeavor, then, it is incumbent upon every city to judge carefully, in the light of such advice as it can secure from county, state, or nation, in which of these three classes just mentioned that enterprise will fall. Thus and thus only may it perform effectively its own peculiar duties, determine the things it may most efficiently do in cooperation with other agencies and learn what it had best let alone. And all this to the end that its service may count for the very most in the winning of this great war.

It seems to me that this is not a problem in which this organization can afford to take merely a casual or purely academic interest. It is true that the Illinois Municipal League is not a body which can directly engage in war work with any real effectiveness. But it does not follow that there is nothing of value which it can do. I submit to you that there are two distinct things which this organization might consider undertaking.

It might, in the first place, provide for or sponsor the making of a careful investigation of just what has been done by the towns and cities of Illinois in the way of effective war service, and what the possibilities in that direction are which have not been adequately developed. A report embodying these facts, coupled perhaps with such recommendations as a committee of the league might care to make would be of inestimable value to the municipalities of this state by letting them know what their neighbors are doing and how they are doing it.

In the second place, it seems to me that such an organization as this might well have a committee on municipal war work which could put itself in touch with the state council of defense, suggesting its willingness to coordinate with that body in any effective way in which its services could be utilized. The chairman of the state council of defense states that no data has been collected regarding the war work of Illinois cities nor have any plans been matured for the coordination of those activities. He declares that the state council would gladly welcome any suggestions which the Illinois Municipal League might make relating to those problems with the assur-

ance that they would be of value and would receive careful consideration.

It seems to me that in these two ways the Illinois Municipal League might render definite service to the cities of this state and to the state itself. It would at least make clear its willingness to further the great cause of the war by helping, however slightly, to mobilize the resources of our municipalities for the effective service to the nation.



# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

FEBRUARY 11, 1918

No. 24

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912.]

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## WHEAT SAVING

Prepared By  
RUTH WHEELER  
Assistant Professor of Household Science



PUBLISHED BY THE UNIVERSITY OF ILLINOIS  
UNDER THE DIRECTION OF THE WAR COMMITTEE  
URBANA

**Women of Illinois: Saving wheat is more important now than saving money**

### Women of Illinois:

It is imperative that we make a greater effort to save wheat.

Our soldiers and sailors and the allies must have bread.

A light digestible loaf cannot be made without some wheat.

There is not enough wheat in the world to give everybody the necessary minimum amount if anybody uses wheat unnecessarily.

And as far as the nourishment of the body is concerned, wheat is not at all superior to corn or oats.

Therefore, be sure your breakfast food is not made of wheat, no matter what ornamental name it may bear; serve quick breads, cookies, puddings, pastries made *without wheat*; replace one-third or even one-half of the wheat in yeast bread by finely ground corn or oats or by potato flour or mashed potato.

The Irish potato is one of the most highly nutritious foods we have. Potato bread is delicious; it keeps fresh longer than all-wheat bread; it makes a beautiful golden toast.

Remember that graham flour and macaroni are all wheat! Use crackers made of other grains than wheat.

### YEAST BREADS

#### *Potato*

Riced boiled potato or commercial potato flour can be substituted for one-half of the wheat flour in bread. The product is especially satisfactory if the coarser wheat flours, graham or whole wheat, are used. The baking temperature should be somewhat lower than that for wheat bread.

#### *Corn*

A mixture of one-half white wheat flour, one-fourth corn meal, and one-fourth corn flour makes a good bread.

#### *Oats*

When one-half of the wheat is replaced by oats, the latter should be in the form of meal or of rolled oats put thru a food chopper. The sponge should be made of wheat and the baking temperature the same as that of all-wheat bread.

#### *Rye*

One-half the wheat flour in bread may be replaced by rye flour or rye meal, the latter giving a rather better product. The first dough should be relatively soft and contain all of the ingredients except one-fifth of the white flour which is saved for the last mixing.

A fair bread may be made by using half rye and for the other half of the flour a mixture of three-fifths wheat flour and two-fifths commercial potato flour.

Rye breads should be baked at a lower temperature than wheat breads thruout the baking period.

Our supply of rye and barley is being rapidly decreased by shipments to the allies. Use corn, oats, and potato, preferably, therefore.

### QUICK BREADS

Good digestible quick breads may be made without any wheat. On wheatless days either these should be served or no bread at all. When large quantities must be baked at once, quick corn bread, such as wafer corn bread or corn dodger, is particularly useful. It is a good food from the nutritive standpoint, is palatable, takes little manipulation, and so is quickly made.

#### *Wafer Corn Bread*

2 cups fine corn meal	1 egg
2 teaspoons baking powder	1 tablespoon fat
$\frac{1}{2}$ teaspoon salt	2 cups milk
2 tablespoons molasses	

Mix corn meal, baking powder, and salt. Add melted shortening, molasses, and beaten egg. Beat. Pour into shallow pans to a depth of not more than one-fourth inch. Bake in hot oven.

#### *Prairie Bread*

$\frac{1}{2}$ cup corn meal	$1\frac{1}{2}$ cups rye flour
$\frac{1}{3}$ teaspoon salt	4 teaspoons baking powder
1 tablespoon vegetable oil	$\frac{3}{4}$ cup milk
$\frac{1}{3}$ cup boiling water	$\frac{1}{2}$ cup chopped nut meats

Put corn meal into a bowl, add salt, oil and boiling water. Mix. Let stand twenty minutes. Now add flour mixed with baking powder and the milk and nuts. Mix lightly, pour into a well greased bread pan; let stand in a warm place twenty minutes. Bake in a moderately hot oven. Do not cut until cold.

#### *Corn Dodger*

2 cups corn meal	2 teaspoons fat
1 teaspoon salt	$1\frac{3}{4}$ cups boiling water

Pour the boiling water over the other materials. Beat well. When cool, form into thin cakes and bake thirty minutes in a hot oven. Makes fourteen biscuits.

#### *Boston Brown Bread*

2 cups corn meal	2 teaspoons soda
2 cups rye flour	1 cup molasses
1 teaspoon salt	2 cups sour milk

Steam for three hours. This is a good flavored bread and compares favorably with other brown breads.

#### *Drop Barley Biscuits*

2 cups barley flour	1 teaspoon salt
3 teaspoons baking powder	1 egg
2 tablespoons fat	1 cup milk

## Muffins

Good muffins can be made without wheat by using one cup of rye meal with one cup of potato, rice, corn, or barley flour, or by using one cup of rye flour with one cup of corn, buckwheat or oat meal. In either case, one egg, milk, fat, sirup or sugar, baking powder, and salt are used, and the whole baked in a hot oven.

## DESSERTS

### *Rye and Rice Pastry*

2½ cups rye flour	1 teaspoon salt
1½ cups rice flour	¾ cup fat
1 teaspoon baking powder	¾ cup water

Sift flour, salt, and baking powder together; cut the fat into the flour mixture. Add water, mixing and handling as little as possible. Chill until ready to roll.

### *Drop Cakes*

1 cup rye flour	3 tablespoons water
1¼ cups rolled oats	2 teaspoons baking powder
½ cup shortening	½ teaspoon salt
¼ cup brown sugar	½ teaspoon cinnamon
½ cup corn sirup	½ cup nut meats
1 egg	½ cup raisins

Combine the sugar and the fat. Add the sirup and the water. Combine the flour, rolled oats, baking powder, and salt, and add to the first mixture. Add the cinnamon, nuts, and raisins. Drop on greased pans and bake in a moderately hot oven.

## MENU FOR A WHEATLESS DAY

Breakfast: Fruit, rice and corn meal waffles and maple sirup, coffee

Lunch: Baked soy beans, oatmeal muffins, jam

Dinner: Tomato soup, pot roast, mashed potatoes, rice custard, coffee

## REFERENCES

Secure the following bulletins from the United States Department of Agriculture, Washington, D. C.

"Start the Day Right"

"Do you know Corn"

"Do you know Oatmeal"

"Plenty of Potatoes"

"Cereal Foods," Caroline L. Hunt and Helen W. Atwater, Farmers' Bulletin No. 817.

"Partial Substitutes for Wheat in Bread Making", Hannah L. Wessling, States Relations Service Document No. 64.

Let us do *more* than the Food Administration asks! We can if all American women make food conservation their first concern and put their best thought into planning wheatless, meatless, sugarless meals that are nutritious and so interesting that the family will look forward to the "——less" meals!

**We must save more wheat even if it costs more money!**

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

FEBRUARY 18, 1918

No. 25

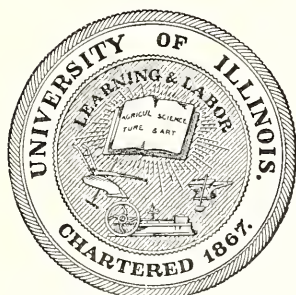
[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912.]

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## THE WAR GARDEN

By  
J. W. LLOYD  
Professor of Olericulture



PUBLISHED BY THE UNIVERSITY OF ILLINOIS  
UNDER THE DIRECTION OF THE WAR COMMITTEE  
URBANA

“The proportion of our national diet in vegetables is very low, and it will not only do no harm to increase it, but in fact will contribute to public health.”—Herbert Hoover.

## OBJECTS OF THE WAR GARDEN

1. To enable the family to produce a supply of vegetables which may be substituted in part for cereals and meats.

2. To grow food supplies at home and thus relieve transportation facilities.

Our Army and our Allies need the concentrated foods that can readily be transported; and the transportation facilities are needed to carry war supplies. The free use of home-grown vegetables will aid materially in both these matters.

## WHAT TO PLANT IN A WAR GARDEN

1. *Vegetables of high food value.* (a) Vegetables rich in protein (meat-savers): Dry beans, fresh Lima beans, green peas. (b) Vegetables rich in carbohydrates (substitutes for other foods rich in starch or sugar): Potatoes, beans, sweet corn, peas, parsnips, beets, carrots, onions.

2. *Vegetables suitable for canning:* Sweet corn, tomatoes, string beans, peas—staple canned goods of the market; easily produced at home. If cans are scarce the corn may be dried.

3. *Vegetables that may be stored fresh:* Potatoes, beets, carrots, parsnips, onions. Production and storage at home save transportation.

4. *Vegetables for summer use:* In addition to the sorts mentioned above, plant lettuce, spinach, turnips, and early cabbage. Confine your efforts to staple products; do not experiment with vegetables difficult to grow in your locality.

## HOW MUCH TO PLANT

For the winter supply, plant enough to have one quart of canned vegetables to five persons every day, for seven months. This would mean approximately 210 quarts. In addition to the canned vegetables, those stored for winter use should include, for a family of five, approximately fifteen bushels of potatoes, five bushels of root crops (parsnips, carrots, beets), and three bushels of onions. A half-bushel of dry beans should also be grown if the locality is well adapted to this crop and facilities for threshing are available.

The following table gives the amounts of seed and land required, under normal Illinois conditions and good care, to produce the quantities of food materials mentioned above.

	Amount of seed	Area of land	Product	Prod. after processing
Sweet corn .....	1 pt.	1500 sq. ft.	40 doz.	60 qts.
Tomatoes .....	50 plants	800 sq. ft.	6 bu.	100 qts.
String beans ..	1 pt.	300 sq. ft.	2 bu.	30 qts.
Peas .....	3 pts.	1200 sq. ft.	3 bu.	20 qts.
Potatoes .....	1½ bu.	3600 sq. ft.	15 bu.	
Beets.....	1 oz.	100 sq. ft.	1 bu.	
Carrots.....	1 oz.	150 sq. ft.	2 bu.	
Parsnips.....	1 oz.	150 sq. ft.	2 bu.	
Onions.....	2 oz.	400 sq. ft.	3 bu.	
Dry beans.....	2 qts.	1200 sq. ft.	½ bu.	

Lima beans may be advantageously substituted for part of the corn. The total area of land indicated is 9,400 square feet—equivalent to a town lot 66 by approximately 142 feet. For growing a supply of vegetables for summer use, about 50 percent additional seed and space would be required.

#### WHAT TO DO AND HOW

1. *Prepare the soil thoroughly before planting.* If manure can be obtained, apply it before plowing. Plow as early as the soil is in suitable condition for working. Disk and harrow until the surface is thoroughly pulverized. Use steamed bone meal and dried blood for fertilizer if manure cannot be obtained. Mix these materials with the surface soil by harrowing. Finish the preparation of the seed bed for small seeds by planking or hand-raking.

2. *Plant good seed.* Seed is scarce this year; order early.

3. *Plant carefully.* Don't waste any seed. Plant small seeds shallow and large seeds more deeply. Firm the soil well over the seeds after covering.

4. *Plant at the proper distances.* Allow enough space between rows for tillage and for full development of the plants. Corn needs more space than carrots.

5. *Plant at the right time.* Potatoes, peas, beets, carrots, parsnips, and onions should be planted early—as early as the ground can be worked in spring. The planting of beans, corn, and tomatoes must be deferred until the weather is warm.

6. *Take good care of the growing crops.* Cultivate frequently. Weed and thin where necessary. Protect from attacks of insects and fungous diseases.

#### GET MORE INFORMATION

Get Circular No. 198, on Home Vegetable Gardening, from the Illinois Agricultural Experiment Station, Urbana, Illinois; and the following publications from the United States Department of Agriculture, Washington, D. C.: Farmers' Bulletin 818, The Small Vegetable Garden; Farmers' Bulletin 853, Home Canning of Fruits and Vegetables; Farmers' Bulletin 879, Home Storage of Vegetables.

#### WHAT TO DO NOW

1. Select your garden site.
2. Plan your garden.
3. Order your seeds.
4. Read gardening literature.



UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

MARCH 18, 1918

No. 29

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912.]

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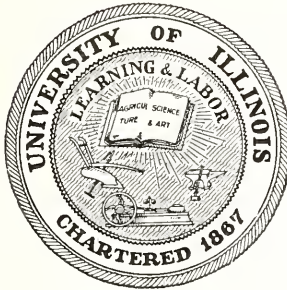
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A PROGRAM IN  
FOOD PRODUCTION

By

EUGENE DAVENPORT

Dean of the College of Agriculture



PUBLISHED BY THE UNIVERSITY OF ILLINOIS  
UNDER THE DIRECTION OF THE WAR COMMITTEE  
URBANA

**The Latest Word: Sell wheat; don't hold it. To hold back wheat for a higher price may mean to lose the war. The outcome depends today more upon the civil population than upon the military.**

## A PROGRAM IN FOOD PRODUCTION

In ordinary times the farmer follows the markets and raises the crops that pay him best. This is not only good business but in the long run it is the best way of serving the public.

Now, however, a higher duty rests upon him. He is in possession of our lands and he must produce, first of all, those foods which the world needs most, regardless of what may be most profitable. Like the soldier, he must do the thing which circumstances require, even at a sacrifice. Unlike the soldier, he will not be called upon to make the supreme sacrifice. While the war lasts, the obligation of the farmer is to work his lands to the best advantage of the Nation and its Allies. In the last analysis the land belongs to the people, and the question before every farmer now is this: "What would Uncle Sam tell me to do on my farm if he were a real person in charge of this war and the resources of the country?"

The markets, being demoralized by congested and irregular transportation, are no longer a guide to what the world needs. That guide is now the Food Administration, which knows the needs of the armies and the Allies and whose expression of these needs as endorsed by the Department of Agriculture is the working basis for an effective program in food production.

All these needs are for *standard* foods, and we shall get on best by adhering to the major foods produced by methods well established by long experience. The situation does not call for a revolution in American farm practice, but rather for certain shifts to meet the disturbed conditions across the water.

### THE NEED FOR WHEAT

The supreme need is for wheat, the greatest of all the bread grains and, with minor exceptions, the most readily transported and stored. European fields are devastated and European farmers have largely turned soldiers. Remote supplies are shut away by lack of shipping, and America must make good that reduction. This will call for more than twice our usual export. With a world shortage when the war began and with a bad season behind us, every acre that can grow wheat should do that work until the shortage is made good and a safe surplus is accumulated.

### FAT

Wars are fought on fat, and fat is the most concentrated of all the forms of food that put energy into the body. It is fat that the Germans lack, it is fat that our corn can produce far beyond the

capacity of any other crop. Vegetable fats and oils are good, but for a variety of reasons the animal fats are far better. Our second great undertaking must be, therefore, to produce the largest amounts possible of the animal fats.

## PORK

Of all forms of animal fat, butter and pork are the most desirable, butter for sedentary people and pork for the laborer, the camper, the soldier—the man who lives out of doors and who needs to get the greatest possible energy out of his food. For this purpose pork is better than butter, for it carries a considerable proportion of lean meat.

Pork is preferable for still another reason: the pig can make more pounds of human food out of his feed than can any other animal except the cow, and that is a fundamental consideration now. The following table from Jordan's "The Feeding of Animals" gives the amounts of human food actually eatable that can be made by the different animals from one hundred pounds of digestible feed.

### HUMAN FOODS PRODUCED FROM 100 POUNDS OF DIGESTIBLE MATTER CONSUMED

ANIMAL	EDIBLE SOLIDS IN POUNDS	ANIMAL	EDIBLE SOLIDS IN POUNDS
Cow (milk) .....	18.0	Poultry (eggs) .....	5.1
Pig (dressed) .....	15.6	Poultry (dressed) .....	4.2
Cow (cheese) .....	9.4	Lamb (dressed) .....	3.2
Ca'f (dressed) .....	8.1	Steer (dressed) .....	2.8
Cow (butter) .....	5.4	Sheep (dressed) .....	2.6

Not only is the pig the most efficient source of all the fats, but fortunately Indian corn, the great crop in which America excels, is of all the feeds the best for the making of high-grade pork. Here is a cumulative advantage in food production possessed by no other country in the world.

## LESS FAT BEEF AND MUTTON

If we are to raise more wheat with less labor, it must mean some reduction in the corn crop, and this reduction must be made good by marketing our beef and mutton with less fat. Tallow and mutton fat are far less eatable than are pork and butter, and the carcass of beef and mutton is less easily transported and stored than is bacon. We shall eat leaner beef and mutton, therefore, while the war lasts and, for a time at least, less of it.

## KEEP UP NUMBERS

This need not mean that we shall raise fewer animals. Indeed the opposite policy should prevail. Europe will need our animals

for the restocking of her herds as soon as the war is over. We have immense quantities of pasture and of forage and these should go into young animals, marketed without extreme finish while the war lasts but maintained in full supply for restocking at whatever moment it may cease.

## THE FARMER MUST HAVE A PROFIT

While the farmer like the soldier must do his duty, and at a sacrifice if need be, there is one important difference between the two. The soldier has but one duty, to fight. He is being fed and supported from behind. The farmer has two duties: one is to feed the world; the other is to do his share in supporting the army with adequate supplies and in meeting the expense of the war. This second duty he cannot discharge unless his business pays out as he goes along, for the farmer is not a capitalist.

## A PROGRAM OF CONSUMPTION

To carry out a program of production will require a reasonable program of consumption. If, for example, the housekeeper uses a kind of potato paste as substitute for butter, she will not only cheat her family of a needful food, but she will by that much help to break down the dairy business, which produces the cheapest of all animal foods. If she reduces milk consumption she will do the same, with nothing gained either in food or in money.

If transportation fails to reduce congestion at any point, the markets will become clogged and the resulting low prices will demoralize production. Mr. Hoover must prevent this. If he cannot ship, he will ask us to consume until he can relieve congestion.

Therefore FOLLOW HOOVER! When he says "save," we should save; when he says "consume," we should consume. In this way only can production be sustained.

This in general is The Illinois Program agreed upon by a recent War Conference at Urbana called by the farmers of Illinois, the State Council of Defense, and the University. The program is recommended to all farmers. It can be had in full by applying to the State Council of Defense, 120 West Adams Street, Chicago.

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV.

APRIL 8, 1918.

No. 32

Entered as second-class matter December 11, 1912, at the post office at Urbana Illinois, under the Act of August 24, 1912.]

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WHAT EVERY ONE SHOULD KNOW ABOUT

## WAR LEGISLATION

By

ROBERT EUGENE CUSHMAN, Ph. D.,

Instructor in Political Science



PUBLISHED BY THE UNIVERSITY OF ILLINOIS  
UNDER THE DIRECTION OF THE WAR COMMITTEE  
URBANA

Don't find fault with the law and the Government in this crisis!  
Obey them!

# WAR LEGISLATION

## What Is Our War Legislation?

It consists of special burdens, obligations, and restraints imposed upon us because we are at war. It is emergency legislation necessary to our national defense, and for the most part will not remain after the war has ended.

*It is necessary:* first, to stamp out treason and disloyalty; second, to mobilize American patriotism and conserve our strength and resources. The loyal citizen wishes to serve; the war legislation shows him what to do and what not to do.

*It is your legislation.* You made it. You elected the Congress which framed it and the President who approved it. It is the crystallized will of the whole people—your will and the will of the nation.

## Why Understand It?

Because even the loyal citizen may easily break the law without knowing it. If you do break it, it is no defense that you were ignorant or that you meant well. "Ignorance of the law excuses no man."

Because public opinion must help enforce the law. You cannot do your part unless you know its methods and its purposes. The good citizen is the intelligent citizen. Learn what the law demands of you and tell your neighbor!

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## WHAT THE LAW REQUIRES US TO DO

### SOME MUST FIGHT—CONSCRIPTION

*Why?* Because the nation cannot wait for volunteers. Because the nation must be free to choose the men who can best be spared and who are best fitted.

*Who?* Men between 21 and 30 inclusive. These men numbered 9,569,382 on June 5, 1917. Men may be exempted for reasons stated by law; e. g., physical defects, dependent relatives, etc. No one can buy exemption from the draft. No one can send a substitute.

*When?* As fast as they are needed and can be used. In the order in which they can best be spared.

*How Long?* Until the cause for which we are fighting has triumphed.

*Penalty?* Imprisonment for the man who fails to respond.

### ALL MUST PAY—TAXATION

**The Reason.** War takes money as well as men. Our government has appropriated \$21,390,000,000 during the first year of the war. Of this, \$2,500,000,000 must be raised by taxation, a sum nearly as large as the entire cost of our Civil War.

**Your share.** Depends roughly upon your ability to pay. The rich must pay. The poor must pay. There are taxes upon luxuries. There are taxes upon necessities. We have not yet begun to approach the burden of taxation now borne by European countries.

## The Taxes

1. *The Inheritance Tax.* An inheritance of \$50,000 or less is taxed 2%. A tax of 2% is laid on all inheritances over that amount supplemented by a series of surtaxes or additional taxes running up to 25% on the amount of the inheritance above \$10,000,000.

2. *The Income Taxes.* Two income tax laws are in force. To determine one's income tax it is necessary to compute the amount due under the act of September 8, 1916, and add to it the tax due under the war income tax law of October 3, 1917. Under the new law \$1000 net incomes of single persons and \$2000 net incomes of married persons are exempt from taxation. Above those points the rates range from 2% up finally to 50% on the amount of income above \$1,000,000.

3. *The Corporation Tax.* Taxes are now levied upon the net incomes of all business corporations (with a few exceptions) at a flat rate of 6%.

4. *Excess Profits Tax.* These taxes are laid upon the profits of individuals, partnerships, and corporations which, after certain deductions are made, are higher than certain percentages of the capital invested. These range from a tax of 20% on profits up to 15% to 60% on profits of 33% or more. When trades, businesses, occupations, or professions have no actual invested capital, an 8% tax is laid on the net incomes of individuals above \$6000 and of corporations above \$3000. The provisions of this law are exceedingly complicated.

5. *Taxes on Luxuries.* It is natural that heavy taxes should be levied upon luxuries. Some of the important commodities in this class are: intoxicating liquors, soft drinks, automobiles, jewelry, sporting goods, cameras, chewing gum, playing cards, yachts, admissions to places of amusement, dues of societies and organizations. The taxes on all such commodities are paid directly by the manufacturer and indirectly by the consumer in higher prices.

6. *Taxes on Necessaries.* Luxuries cannot pay all the taxes. Large sums must be raised by taxing the common necessities of life. Taxes are therefore placed upon medicines, toilet articles, railroad tickets, long distance telephone service, telegrams, postal service, insurance policies, express and parcel post packages, and numerous commercial and financial documents such as bonds, stocks, promissory notes, deeds, etc.

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## WHAT THE LAW FORBIDS US TO DO

### ACTS OF TREASON AND DISLOYALTY

The government deals promptly and severely with traitors, spies, and disloyal agitators. Treason is the crime of "levying war against the United States, or in adhering to their enemies, giving them aid and comfort." It is punishable by death. Other offences (given below) are punished by heavy penalties.

1. *Acting as a Spy.* Every nation punishes the spy with death. His crime is that of giving the enemy information about our national defense. Every one is forbidden under heavy penalty to secure information about national defense with

the intention that it may be of use to the enemy. In regard to all such matters the safe rule for the loyal citizen is to mind his own business and keep his mouth shut. (Penalty: \$10,000 fine, 2 yrs. imprisonment, or both.)

2. *Violence and Wilful Destruction of Property.* The law is lying in wait for the man who burns or blows up bridges, warehouses, and the like. Such acts may be treasonable as "giving aid and comfort to the enemy," while they are in addition crimes against the laws of the separate states. The federal government has placed special penalties upon violent interference with commerce, shipping, and telegraph lines (\$10,000 fine, 10-20 yrs. imprisonment, or both).

3. *Disturbance of Foreign Relations.* To make false statements for the purpose of injuring the United States in its relations with a foreign nation is a crime. It is also a crime to conspire in the United States to injure the public property of a government with which we are at peace. (Penalty: \$5000 fine, 5 yrs. imprisonment, or both.)

4. *Hostile Acts Against Friendly Nations.* Our neutrality laws forbid making this country the base of any hostile operations or expeditions against friendly nations. Persons were recently convicted in New York for plotting to blow up the Welland Canal and others for scheming to cause a rebellion in India. (Penalty \$3000 fine, 3 yrs. imprisonment.)

5. *Circulation of False Statements to Aid the Enemy.* A lie may be a deadly weapon against us. Those who make or repeat false statements for the purpose of interfering with our military or naval success while we are at war are liable to severe punishment (\$10,000 fine, 20 yrs. imprisonment, or both).

6. *Inciting Disloyalty in the Army and Navy.* The Germans have won victories in this war simply by insidiously undermining the morale of the Allied Armies. It is therefore made a crime to incite to disloyalty, insubordination, mutiny, or refusal of duty in our military or naval forces by any method whatsoever. Men who are registered for the draft are part of our military forces although not actually in service. (Penalty: \$10,000 fine, 20 yrs. imprisonment, or both.)

7. *Obstruction of Recruiting.* The law says that there must be no wilful interference with the man who wishes to enlist in the army or navy. There is a heavy penalty for violations of this act (\$10,000 fine, 20 yrs. imprisonment, or both).

8. *Criminal Conspiracies.* It is a crime against the United States for two or more persons to plot or conspire to overthrow the government, oppose its authority, obstruct the enforcement of its laws, destroy its property, or violate any of its laws. Every person involved in such a conspiracy is guilty even though the plot failed or was never carried out. (Penalty: \$5000 fine, 5 yrs. imprisonment, or both.)

9. *Threats Against the President.* There is a severe penalty for any one who threatens, in speech, writing, or any other way, to injure bodily or to kill the President of the United States (\$1000 fine, 5 yrs. imprisonment, or both.)

10. *Abuse of the Flag.* The laws of Illinois and other states forbid any one to use the United States flag for advertising purposes or to desecrate, defy, or cast contempt upon it in any way.

11. *Misuse of the Mails.* Every person is forbidden to send through the mails any communication which is treasonable in character or which urges or advocates



treason, insurrection, or forcible resistance to any federal law. A severe penalty is attached (\$5000 fine, 5 yrs. imprisonment, or both).

12. *Failure to Report Violations of the Law.* Heavy punishments are visited upon those who harbor violators of the law or fail to make known facts in their possession regarding crimes and conspiracies, whether carried out or not, against the United States. (Penalty: \$10,000 fine, 2 yrs. imprisonment, or both.)

## TRADING WITH THE ENEMY

A loyal citizen might easily violate this prohibition without knowing it.

You should know, therefore, that

### **The Enemy**

is composed of the following classes:

1. Every person who lives in Germany, Austria, or the territory of their allies, or in any territory occupied by them; e. g., Belgium.
2. Every person living outside the United States who does business in such enemy territory.
3. Every corporation created by Germany or her allies.
4. Corporations not created by the United States or the states thereof and doing business in enemy territory.
5. The government, subdivisions, cities, officers, and agents of Germany and her allies.
6. Enemy aliens interned in the United States for the period of the war.
7. Such other classes of persons as the President may designate.

### **You Must Not**

1. *You must not have business intercourse with the enemy.* Every kind of financial and commercial transaction is forbidden except under such license as the President may grant. (Penalty: \$10,000 fine, 10 yrs. imprisonment, or both.)
2. *You must not send communications out of the country except through the mails* This applies to every possible communication in tangible form and forbids its transmission directly or indirectly unless under special license. (Penalty: \$10,000 fine, 10 yrs. imprisonment, or both.)
3. *You must not evade the censor.* Rigid censorship has been placed upon all foreign mail, telegraph, cable, and wireless service. You are forbidden to attempt in any way to avoid submitting any outgoing communication to this censorship or by the use of any secret code to conceal from the censor the true meaning of the communication. (Penalty: \$10,000 fine, 10 yrs. imprisonment, or both.)

## TRADING WITH ANY FOREIGN COUNTRY WITHOUT A LICENSE

We are 3000 miles from the seat of war. Shipping has become a vital problem. The government must be able to use every American ship for the purposes which are most important at the moment. Therefore no one may engage in the import or export trade without a license, which subjects the holder to regulation and control (Penalty: \$5000 fine, 2 yrs. imprisonment, or both.)

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## IGNORING THE WAR RESTRICTIONS LAID UPON YOUR BUSINESS

1. *Businesses Which Are Prohibited.* We must save food. It is therefore forbidden to use any food products in making whisky or any distilled spirits to be used as a beverage.

2. *Businesses Which Must Be Licensed.* Those who produce, store, or distribute the necessaries of life, except farmers and retail merchants, may be required by the President to take out licenses and conduct their businesses under government regulations.

Such licenses are now required in the case of foods, fertilizers, and some chemicals.

No person whatsoever may make or sell explosives without a license.

3. *No Destruction of Necessaries of Life.* To destroy food, fuel, or other necessary products for the purpose of increasing the price or reducing the supply is punishable by a heavy penalty.

4. *No Hoarding.* Any person who wilfully hoards the necessaries of life may be imprisoned or fined and the hoarded goods may be sold.

5. *Excessive Prices Forbidden.* The law deals sternly with the profiteer. Exortion will not be tolerated.

Coal and coke must not be sold at a higher price than that fixed by the President under penalty. Thus far the price at the mine only has been fixed.

Food and necessaries must not be sold at unreasonable prices. Licensed producers and distributors will have their licenses revoked for charging exorbitant prices. Unlicensed dealers will have their supplies cut off for the same offense.

Violations of any of these provisions are punishable by \$5000 fine, 5 years imprisonment, or both.

# WHAT THE NATION ASKS YOU TO DO

Patriotism is not content with obeying the letter of the law. The loyal citizen will gladly do more than he is obliged to do. The nation is relying upon this voluntary cooperation of all the people.

Our government is still requesting of us many things which European nations have been obliged to command. It rests with us to make compulsion unnecessary.

America, therefore, makes her appeal to your loyalty to do four things:

## SAVE!

### **Save Food!**

"Food will win the war. Do not waste it."

We must feed ourselves and our Allies.

Raise a garden and eat perishable foods.

Follow the rules of the Food Administrator.

### **Save Fuel!**

Do not burn it needlessly. An open grate wastes three fourths of your heat.

Use wood instead of coal if you can.

In winter heat your house to 68° instead of 75° and save nearly 25% of your coal.

### **Save Money!**

Cut down money spent for luxuries.

Buy and use only necessary articles.

Economy is vital to the nation; help make it fashionable.

Labor which produces unnecessary things is wasted. Do not encourage it.

## LOAN!

If you cannot fight you can help by lending the government the money which it must have.

A Liberty Bond is a certificate of your faith in the justice of the cause for which we are fighting.

The United States is the best creditor in the world.

The interest paid makes patriotism a paying investment.

Loan the money you save—Save the money you loan!

**Buy Thrift Stamps!**

**Buy Liberty Bonds!**

**GIVE!**

The government encourages you to give generously to relieve the sufferings and add to the comforts and happiness of the victims of war.

**Give to the Red Cross.** Your money is needed to help care for the wounded soldier.

**Give to the Army Y. M. C. A.** Your money is needed to provide recreation, clean amusements, a touch of home, for the boys in camp and trench.

**Give to the Armenian and Syrian Relief and Similar needs.** Your money is needed to save the lives of men, women, and children who are actually starving.

**WORK!**

There is something you can do to help win this war.

Acquaint yourself with the countless opportunities for service.

Find out which is yours.

Do it!

Now!

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

MAY 6, 1918

No. 36

Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912.]

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## WHAT THE UNITED STATES HAS ACHIEVED IN WAR ACTIVITIES AND MORAL LEADERSHIP

BY

EDMUND JANES JAMES

President of the University



PUBLISHED BY THE UNIVERSITY  
UNDER THE DIRECTION OF THE WAR COMMITTEE  
URBANA

WHAT THE UNITED STATES HAS ACHIEVED IN  
WAR ACTIVITIES AND MORAL LEADERSHIP\*

Friends, Colleagues and Students:

We are gathered here this afternoon, not so much to review what we have done or failed to do in the Great War during the past year, as to dedicate ourselves anew to the great enterprise that we have undertaken.

In spite of all that has been said during the year in which we have been at war with the Central Powers of Europe, sustaining and helping our hard-pressed and courageous Allies, it does not seem to me that the average American citizen even yet realizes what a fundamental world issue is involved; how great is our privilege in being permitted to enter this conflict actively and on the right side; how important a turning point in the history of the world the outcome of this war may be; and how fortunate we are in having a president, who has seized the opportunity to convert what to a narrow observer seemed a mere struggle for additional territory and additional material resources into a great issue in the progress of human freedom.

When Louis XVI called together the Estates General in the year 1789 to take counsel as to the state of the kingdom, a struggle arose between the king and the representatives of the various orders, which might easily have remained a mere local incident in the life of a single nation. But the genius of the French people converted it into a great crusade for liberty, equality, and fraternity, out of which grew that mighty convulsion, called simply "The Revolution," so fundamental in its characteristics and results, so sweeping in its wide-spread influence, that all previous human history seemed a mere preparation for it and all subsequent history a mere outcome of it; all previous lines of development seeming to converge toward it and all subsequent lines of progress to spring out of it.

The present war at first was regarded by some as a mere contest on the part of great nations for more territory and a larger population and greater wealth. It was natural to judge from previous human experiences that smaller powers standing in the way

\*Abstract of an address by the President of the University at the general convocation held April 8, 1918, in honor of the first anniversary of the entrance of America into the Great War, April 6, 1917.

of the waves of this furious struggle for national supremacy would be swept away, devastated, ruined, utterly effaced perhaps,—and that all this would happen as so inevitably a result of the conflict of great powers that while much sympathy might be felt or even expressed, the only active result would be a shrugging of the shoulders and an “alas! alas! Such is life. Such is the fate of the small man! and the small nation!”

And then the conduct of the Central Powers became such that even those Americans who did not appreciate or care for a moral role among the nations for the Great Republic saw themselves constrained to force action in order to defend our national independence, nay, our national existence.

Even then the issue might have been narrowed and might have been formulated as a selfish one, affecting ourselves alone or the particular desires of national units, such as the securing to Italy of the territory it desired at the expense of Austria, or the giving to Russia of the right to determine the eastern boundaries of Germany, while to France and England should be given a similar privilege as to the western boundaries, and the assignment to England of the German Colonies—a kind of dispute in which the American people could have little personal interest except so far as it safeguarded or threatened our power or security.

With one noble and sweeping gesture President Wilson wiped out all these items on the slate of world division and organization and wrote down as our goal the safeguarding of human liberty throughout the earth: to all people—not merely to ourselves—to the small as well as to the great—to the weak as to the strong—the assurance that they may order their own lives as freemen.

This is a program to which we may all subscribe, for which we Americans may all toil and suffer and sacrifice and, if need be, die, because we believe that human liberty is the foundation stone of all human progress.

Now the great thing which President Wilson has done is to make this program of his the program of the United States, the program of the Allies,—nay, the program of the world; for even the Central Powers have been compelled to adopt the same slogan—even the Kaiser is emphasizing that he has gone into Russia not for his own sake but to free its people. We have not been misled,

of course, by this statement, for we know the kind of freedom that the lion brings to the lamb,—a freedom, it is true, from responsibility, a freedom from independence, from self-determination, a freedom from freedom with all its toil and trouble and sacrifice,—but at the same time a freedom from all the joys and ecstasies of self-development and progress which freedom permits.

Never before in human history have so many nations lined up consciously for the great end of establishing the right of all to live, and also their bounden duty to let live, and for this end we have to thank the President of the United States, Woodrow Wilson. Let us stand by him until this end is achieved!

There is another side from which our participation in this war may bring to us satisfaction and hope. The advantage of victory in this great war, friends, will not redound merely to the Pole, the Bohemian, the Slovak, the Serb, but also, and in no less degree, to the subjects of other governments, fighting not on the side of the Central Powers but on the side of the Allies,—on our side.

We Americans can not in good conscience and with self-respect line up for freedom and fair treatment for the Pole and Serbian without forming a new and more potent resolution that the negro, the Porto Rican, the Filipino shall have no reasonable cause of complaint under our government. We can not insist that the German Government shall secure political rights to the common man without resolving anew that the ordinary civil rights shall be secured to all our citizens alike, no matter what their color or race or previous condition of servitude; without determining that mobs and lynching parties shall have an end throughout the broad territory subject to the jurisdiction of the Republic.

I do not mean to say that all these things are going to happen immediately upon the conclusion of peace, but I do maintain that they are all involved in a complete and sweeping victory by the Allies over the Central Powers.

A chapter out of our own history, which we ought never to forget, will help us to understand what will be possible if we only keep our eyes on the stars.

On the fourth of July, 1776, a representative body of American colonists announced to the world a thesis for the defense of which they pledged their lives and fortunes and sacred honor. This thesis



was that all men are created equal; that they are endowed by the Creator with certain inalienable rights, among which are life, liberty and the pursuit of happiness.

None of these men found it particularly inconsistent with the above thesis to hold human slaves in a peculiarly debasing form of bondage known as African slavery. Such a practice was, of course, not consistent with the profession given above, and when this profession was once made, so great is the power of the winged word that the practise had to cease in time or the profession had to be renounced. That profession was not, alas! the statement of a fact in existence at that time, but a prophecy of something to come; and one of those peculiar prophecies,—thank God,—the mere formulation of which helps to their realization.

It behooves us Americans, who have entered this great contest for human liberty, to remember how easily such a conflict may degenerate and how necessary it is to hold it on a high plane, worthy of our aspiration and our sacrifice. We ought not to forget that the price of liberty is still eternal vigilance, watching not merely over our enemies, but over ourselves, our desires, our ambitions, our conduct.

In spite of that magnificent announcement in the Declaration of Independence, which sounded a new note in the history of the world, leading directly to the French Revolution and all its consequences, it was nearly ninety years before we in this country were willing to draw the logical conclusion and to take the decisive step in our own policy so imperatively called for by the sentiments and language of this declaration. Eighty-five years after the Declaration of Independence was given to the world, calling forth sentiments and aspirations that seemed to have died out in the world's breast, a considerable proportion of the intelligent, liberty-loving, warm-hearted American citizens pledged their lives and fortunes and sacred honor to a war in defense of this same institution of African slavery. And it was not until they were thoroughly defeated, until a million precious lives had been sacrificed, uncounted billions of money had been destroyed, that they finally acquiesced in an outcome of the Civil War, which was nothing but the logical development of the Declaration which their ancestors had adopted, and to which they had pledged their support and enthusiasm for near-

ly a century. With the close of the American Civil War, the Declaration of Independence began to have a new meaning for us, although it is far from being realized fully yet.

This war and our relation to it will put a new and larger meaning into this great Declaration of which every American should be proud and which every American should be determined to help realize to the fullest possible extent. We shall come to understand more fully than we do now that the rights to life, liberty, and the pursuit of happiness are not mere negative rights but positive rights calling not merely for inaction, but for positive policies on the part of society that they may be fully realized. Thus the time shall be hastened when no man who is able and willing to labor shall suffer for lack of work; when to every one willing to do his share the means for living a decent human life shall be secured; when economic and industrial liberty shall be recognized as essential elements in that civil liberty chiefly contemplated in the Declaration.

Toward all this a decisive and early victory over Germany and her allies will be greatly conducive.

We ask you all to enlist in this war and for the duration of this war in the trenches, in the factories, in the shipyards, on land and on the sea, in your own homes—wherever you are and whatever else you may be doing—all the time helping to create that atmosphere which will insure success.

I have been asked to say one word, and my time limits do not permit more, about what our country has already accomplished during this first year of the war toward the winning of it.

First of all I wish to say in a very positive way that I think our achievements in this direction have been truly remarkable and are fully comparable with the best done by other nations working under anything like similar conditions, and I think our Government deserves the respect and confidence of the American people.

Of course we have made mistakes—many of them and shall doubtless make many more—costly, bitter mistakes owing partly to that cockiness which is so characteristic of all us Americans; partly owing to our ignorance; partly to our inefficiency in making war to which this generation is practically strange, for our Spanish war was not a war at all; partly to our love of individuality which makes co-operation difficult; partly to our ingrained partiality for competition instead of combination, etc., etc.

In spite of all this, we have adopted a system for recruiting our armies far superior to anything we ever had before. It has been inaugurated without difficulty and with little trouble, and with the full consent as well as the enthusiastic support of the American people. It is the most democratic plan we have ever employed and with a few changes will rank with the best schemes ever adopted for this purpose, viz: recruiting the armies of a free State and providing for their maintenance in man power and equipment.

We have called a large number of men to the standards and are training them for the various branches of military and naval service under, on the whole, very satisfactory conditions, though there have been some egregious mistakes, calculated to make us blush for American inefficiency. Instances of gross inability, however, to handle difficult situations are becoming less numerous as our organization is improved.

Again, we have raised a different kind of army from any army hitherto produced in the history of mankind,—an army of which we shall be increasingly proud as the months go on and from the training of which our country will derive an advantage long after the war is over.

We have begun to build and launch ships and from all present indications we shall soon be turning out an increasing tonnage. We were not a nation of shipbuilders and it takes time to train men and get material. We are manufacturing munitions and guns faster than we can get them to the front, and there is no reason to suppose that we shall break down at any time in this work.

Our aircraft program has from various causes failed to meet our reasonable expectations. The full causes have not yet been made public but it looks now as if the whole movement were going into a new era and we shall speed up in this department also.

We have been successful in our war finance. All our enterprises have turned out well. Our taxes have yielded all that was expected of them. Our loans have been over-subscribed, and the Red Cross, Y. M. C. A., and Knights of Columbus campaigns, fruitful beyond our expectations.

We have been able to meet all our bills and lend in addition large sums to our Allies to help them in their straits.

Above all and finally and most important of all, we have begun to send troops to the firing line.

We have already done very substantial service in helping to meet the submarine danger and thus help keep the ocean safe for the transport of troops and supplies.

We have sent, nobody outside the War Department knows really how many, troops to France and England, but my guess is over one-half million. No information has as yet been given out as to how many troops are actually on the firing line.

But one great fact stands out in which we may take profound comfort in spite of regret that we have not done more, viz: that before the close of the first year after the declaration of war, a considerable number of American soldiers were actually engaged by the side of our English and French comrades in defending the battle line of freedom on the bloodstained fields of France. Coming to their aid from every part of this country are long lines of railway trains filled to their limits with American boys—great steamers are sending them by the tens of thousands to the training camps in France. Guns, amunition, supplies of all sorts make almost continuous moving lines from the great forests of Washington, Oregon, and the mines of California, Nevada, Arizona, and the wheatfields and stockranges of the whole North American Continent—ever on! ever on to the trenches of France and Belgium!

What does it all mean? What can it mean except victory for our Allies? The Germans may take Amiens; they may take Paris; they may take Calais; but the more they take the more they will ultimately have to disgorge. The further they drive forward, the longer the way back. The greater their temporary victory, the more crushing their final defeat.

The stars in their courses are fighting for us and our cause, and if only we are true to the high ideals we have adopted, and show ourselves worthy of our ancestry—in energy, in perseverance, in skill, and in devotion—the victory, an overwhelming victory will be ours.

A victory for us means victory for the forces of righteousness and of progress; protection for the small nation and the small man, for women and children. It means LIBERTY and FREEDOM for all!

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

JUNE 17, 1918

No. 42

Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912]

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## MILK

By

RUTH WHEELER

Assistant Professor of Household Science



PUBLISHED BY THE UNIVERSITY OF ILLINOIS

UNDER THE DIRECTION OF THE WAR COMMITTEE

URBANA

Use more milk; it is an important factor of safety in the diet

# M I L K

## VALUE OF MILK AS FOOD

It is not always easy to give the family just the proteins and minerals and fatty foods that they must have to maintain perfect health. Milk contains them all. It is the most valuable of all foods.

No proteins are better for growth than milk proteins.

No other food contains so nearly perfect a balance of minerals for building bones and tissues.

Milk contains both types of the essential accessory substances without which health and even life is impossible. One of these is associated with milk fat.

Other foods contain these substances but few single foods contain them all in so useful a form.

As a source of protein, 1 quart of milk is equal to 7 ounces of sirloin steak or 4.3 eggs. At 15 cents a quart, milk is as cheap a source of protein as sirloin steak at 35 cents a pound.

## HOW TO USE IT

Get whole milk. Use every drop of it. Plan to use it before it sours unless you can take time to make use of every bit of it afterward.

Give the children whole milk to drink. It is a good scheme to plan the children's meals around milk as the chief food, giving each one quart a day, adding especially cereals, and, to supply the iron which is present in too small amount, egg yolk, green vegetables, spinach, carrots, and peas. Other vegetables and fruits are valuable to keep the digestive system in good condition as well as for additional food.

Grown-ups should each have a pint of milk a day. They may divide theirs if they wish, having cream for coffee, cereal, or dessert, and skimmed milk in cooked dishes.

## CARE OF MILK

See that your milk comes to you clean and keep it clean. Visit the dairy now and then.

Keep milk cold until you are ready to use it. It nourishes bacteria as well as human beings, and if it is warm, bacteria multiply rapidly in it.

When clean fresh milk is not available, use condensed or desiccated milk. The unsweetened varieties are better for children.

## SKIMMED MILK AND BUTTER

Skimmed (separated) milk has about half the food value of whole milk. It is a valuable source of minerals and of protein.

Adults may take their pint a day in this form if they eat butter or fat from meat and eggs or oleomargarine made from beef fat. If the fat in the diet is chiefly nut butter, lard, or vegetable oil, whole milk is advisable.

Butter is not indispensable. If you cannot afford it or the government for a time should need all there is, no one who has milk will suffer. On the other hand, if you prefer butter and can afford it, eat it when the Food Administration does not ask you to save it.

## COTTAGE CHEESE<sup>1</sup>

Cottage cheese is richer in protein than most meats and is very much cheaper. Every pound contains more than three ounces of protein, the source of nitrogen for body building. It is a valuable source of energy also, tho not so high as foods with more fat. It follows that its value in this respect can be greatly increased by serving it with cream.

Cottage cheese alone is an appetizing and nutritious dish. It may also be served with sweet or sour cream, and some people add a little sugar, or chives, chopped onion, or caraway seed.

The following recipes illustrate a number of ways in which cottage cheese may be served:

### Cottage Cheese With Preserves and Jellies

Pour over cottage cheese any fruit preserves, such as strawberries, figs, or cherries. Serve with bread or crackers. If preferred, cottage cheese balls may be served separately and eaten with the preserves. A very attractive dish may be made by dropping a bit of jelly into a nest of the cottage cheese.

### Cottage Cheese Salad

Mix thoroly one pound of cheese, one and one-half tablespoons cream, one tablespoon chopped parsley, and salt to taste. First, fill a rectangular tin mold with cold water to chill and wet the surface; line the bottom with waxed paper, then pack in three layers of the cheese, putting two or three parallel strips of pimiento, fresh or canned, between the layers. Cover with waxed paper and set in a cool place until ready to serve; then run a knife around the sides and invert the mold. Cut in slices and serve on lettuce leaves with French dressing and wafers or thin bread-and-butter sandwiches. Minced olives may be used instead of the parsley, and chopped nuts also may be added.

### Cottage Cheese Rolls

(To be used like meat rolls)

A large variety of rolls, suitable for serving as the main dish at dinner, may be made by combining legumes (beans of various kinds, cowpeas, lentils, or peas) with cottage cheese, and adding bread crumbs to make the mixture thick enough to form a roll. Beans are usually mashed, but peas or small Lima beans may be combined whole with bread crumbs and cottage cheese, and enough of the liquor in which the vegetables have been cooked should be added to get the right consistency; or, instead of beans or peas, chopped spinach, beet tops, or head lettuce may be added.

<sup>1</sup>From Dairy Division, Bureau of Animal Industry, United States Department of Agriculture.

### Cheese Roast

2 cups kidney or Lima beans	Bread crumbs
1 cup cottage cheese	Salt

Mash the beans or put them thru a meat grinder. Add the cheese and enough bread crumbs to make the mixture sufficiently stiff to be formed into a roll. Bake in a moderate oven, basting occasionally with butter or other fat and water. Serve with tomato sauce. This dish may be flavored with chopped onions, cooked until tender in butter or other fat and a very little water, or chopped pimientos may be added.

### Cottage Cheese and Nut Roast

1 cup cottage cheese	2 tablespoons chopped onion
1 cup chopped English walnuts	1 tablespoon butter
1 cup bread crumbs	Juice of a half lemon
	Salt and pepper

Cook the onion in the butter or other fat and a little water until tender. Mix the other ingredients and moisten with the water in which the onion has been cooked. Pour into a shallow baking dish and brown in the oven.

### Cheese Sauce

(For use with eggs, milk toast, or other dishes)

1 cup milk	2 tablespoons flour
1 tablespoon cottage cheese	Salt and pepper

Thicken the milk with the flour and just before serving add the cheese, stirring until it is melted.

This sauce may be used in preparing creamed eggs or for ordinary milk toast. The quantity of cheese in the recipe may be increased, making a sauce suitable for using with macaroni or rice.

### WHEY

If you make your cheese and throw away the whey, you waste more than one-fourth the total food value of the milk.

#### Whey Lemonade<sup>1</sup>

4 cups whey	Slices of lemon, or a little
6 tablespoons sugar	grated or diced rind,
Juice of 2 lemons	nutmeg, or cinnamon

#### Whey Honey<sup>1</sup>

1 cup whey	$\frac{1}{3}$ cup sugar or
	$\frac{1}{2}$ cup corn sirup

Mix whey and sugar and boil the mixture till it is of the consistency of strained honey. This sirup will keep indefinitely, if properly bottled, and is delicious for spreading on waffles or pancakes. Used a little thinner, it makes an excellent pudding sauce. Since it requires no thickening, it is the easiest possible sauce to make.

<sup>1</sup>From Circular 109, United States Department of Agriculture.

**Don't begin your economizing by cutting down your milk supply**



# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

JUNE 24, 1918

No. 43

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois under the Act of August 24, 1912]

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## MEAT

By

LUCILE WHEELER

Associate in Household Science



PUBLISHED BY THE UNIVERSITY OF ILLINOIS

UNDER THE DIRECTION OF THE WAR COMMITTEE

URBANA

Only strict economy in the consumption of meat at home will allow meat for the Allies and our soldiers abroad.

Meat cannot be kept indefinitely. Therefore, a condition may arise which will alter the meat situation temporarily.

Watch the rules issued by the Food Administration.

# MEAT

## WHAT TO USE--HOW TO USE IT

The necessity for a meatless day has not disappeared. A different plan is to reduce the amount of meat purchased and prepared each and every day.

Meat must be saved now more than ever.

Before the war, less than 15,000,000 pounds of meat a week were exported; now, 75,000,000 pounds a week are called for.

If the meat is consumed here it cannot be sent abroad. If each one will eat less, it can be done.

Fewer animals are being shipped to the meat centers. The meat supply cannot be increased rapidly, for it requires time and extensive acreage. We cannot spare the land, for land in potatoes produces nearly forty times as much food value as medium grass land. One acre yields six tons of potatoes or one hundred pounds of meat.

No increase in the meat supply but an increase in the demands from abroad means that *strict economy in meats is the rôle for each to play to help win the war.*

## THE PROBLEM

1. To conserve the meat supply.
2. To save the meats best for export for the allies and our own soldiers.
3. To utilize in the best way the perishable meats and those not requisitioned by the government.
4. To vary and extend the consumption and to prevent waste of all meats and fats.

## WAYS TO SOLVE IT

1. See meat before buying it. Telephone orders often prove disappointing.
2. If previously you have used expensive cuts, steaks, and roasts from heavy beef, use these sparingly now. A demand for only the cheaper cuts from the rich, the well-to-do, and the poor, causes a rise in price of cheap meats. Equalize the demand.
3. Save all meat trimmings, gristle, bones, left overs from choice cuts, and cook in stews and soups as tougher cuts of meat are used. The fireless cooker helps here.

4. Learn the value of small quantities of meat. Use it as a flavor to a dish rather than as the main ingredient. Stews and casserole dishes are meat extenders as they give meat flavor to a larger amount of food; they conserve the meat juices and all the nutrients of the vegetables; and they save dishes by cooking meat and vegetables together. Vary them by using different meats and vegetables. Meats with gravy go farther and increase the amount of potatoes used. Omit bread at dinner.

5. Use more lamb and mutton as you use fish to save beef.

6. Use the shoulder and sides of pork, any uncured cuts, and ground sausage. Use ham occasionally.

7. Buy only triangular pieces of bacon and trimmings from the army bacon. The boys over there get the square cut. Bacon is the ideal army meat ration. It is fuel for fighting.

8. Save all fats—chicken, beef, mutton, pork; render and clarify them. Use them in frying, in spice cakes, cookies, and bread-making. Fats are valuable not only for food for the soldier but as the source of glycerine used in explosives.

## POSSIBILITIES IN MEAT COOKERY

### Meat Cooked to Furnish Gravies and Sauces

Swiss steak

Beef à la mode

Pot roast

Braised tongue

### Meat Extenders

Shepherd's pie

Tamale pie

Hash

Croquettes

Lamb stew

Scrapple

### Meats Which Should be Used More Often

Liver

Tripe

Stuffed beef heart

Minced kidneys

Creamed calves' brains

Chipped beef

Sausage

## RECIPES

### Swiss Steak

Use round steak cut one to one and one-half inches thick. Cut off fat from the sides of the meat and put in frying pan to try out. Season meat with salt and pepper and place on a meat board. Dredge thoroly with flour on one side and cut this in by pounding with the edge of a plate or saucer. Turn meat and repeat. Brown a few slices of onion in the frying pan with the fat, then add the floured meat. Brown on each side. Cover with water and simmer slowly two hours or put in oven and continue slow cooking. Thicken the liquid for gravy.

### Beef a la Mode

Take a two pound rump cut and remove bone (bone may be used for soup). Sear meat in a little fat to improve flavor. Put it in boiling salted water so that it is covered; simmer until tender; keep covered with water. When tender, draw off part of broth and use for gravy. Then put in one-half sweet pepper chopped fine, one carrot cubed, one can tomatoes, and allow to cook down until brown and serve with sauce that covers meat.

### Casserole or Pot Roast

Brown a piece of rump of beef in a little fat. Place in casserole with chopped carrot, turnip, onion, and celery. Add water to cover and cook three hours in hot oven, basting if necessary. The roast may be cooked in a pot on top of the stove for part of the time and then transferred to the oven when potatoes are added. Serve with thickened gravy.

### Braised Tongue

1 beef tongue	$\frac{1}{3}$ cup celery, diced
$\frac{1}{2}$ cup carrots, diced	1 sprig parsley
$\frac{1}{3}$ cup onion, diced	$\frac{1}{2}$ cup peas

Cook tongue slowly in water for two hours. Take out and remove skin. Place in baking dish with vegetables. Add four cups of sauce. Cover closely and bake two hours, turning after first hour. If canned peas are used, do not add at first with uncooked vegetables.

### Sauce for Tongue

Brown one-fourth cup butter or other fat. Add one-fourth cup corn flour or other substitute flour and stir till well browned. Add gradually four cups of hot water in which tongue was cooked. Season with salt and pepper and one teaspoon of Worcestershire Sauce if desired.

### Shepherd's Pie

$\frac{1}{2}$ cup cold meat—lamb or beef	3 tablespoons drippings
1 cup or more mashed potato	3 tablespoons flour
Salt	1 pint liquid—water or stock
Pepper	Few drops of onion juice

Cut meat in small pieces; season. Melt fat, add flour, and gradually the liquid, stirring constantly till it boils. Gravy can be used and flour omitted. Add meat and pour in baking dish or casserole. Cover with mashed potato and brown in oven.

### Tamale Pie

2 cups corn meal	1 pound hamburger or lamb
$2\frac{1}{2}$ teaspoons salt	2 cups tomatoes
6 cups boiling water	$\frac{1}{2}$ teaspoon cayenne pepper or
1 onion	1 small, chopped sweet pepper
1 tablespoon fat	1 teaspoon salt

Make mush by stirring corn meal into boiling salted water. Cook in a double boiler or fireless cooker one and one-half hours. Brown onion in fat, add meat, and stir until red color disappears. Add tomato, pepper, and

salt. Grease a baking dish; put in a layer of mush, then the seasoned meat, then another layer of mush on top. Bake thirty minutes.

### Meat Hash

Combine equal quantities of cold, chopped boiled potatoes and chopped meat containing some fat. Season with salt and pepper, and moisten with meat stock, gravy, or milk. Spread evenly in a hot greased frying pan. Heat slowly until brown underneath. Hash may also be baked. Vary recipe by adding vegetables, such as cooked beets.

### Baked Croquettes and Meat Loaf

Meat may be combined with an equal amount of mashed potato or in the proportion of one-third meat and two-thirds potato. Various seasonings, such as onion and celery salt, may be added. Moisten with milk or water; add egg slightly beaten. Bake in a bread tin or shape as croquettes. If croquettes are fried in deep fat, shape and roll in egg and crumbs.

### Lamb Stew

Wipe and cut in pieces two pounds of lamb from shoulder, flank, or breast. Cover in kettle with boiling water, cook slowly till tender, about two hours. Add diced vegetables—carrot, turnip, and slices of onion—after cooking one and one-half hours. Twenty or twenty-five minutes before serving, add potato cut in small pieces. Make a thickening of three tablespoonsful of flour and cold water to form a smooth paste and add to stew, stirring till it boils. Serve with more potatoes than usual and omit dumplings.

### Casserole of Lamb

Line a casserole, slightly greased, with steamed rice. Fill center with cooked mutton finely chopped. Season highly with salt, pepper, celery salt, and onion juice. Cover with rice. Heat in oven with casserole covered. If desired to have firm enough to turn out on a platter, remove cover and brown. Serve with tomato sauce. If served in the casserole, add water, stock, or gravy to mutton and rice when filling dish. Tomatoes may also be added instead of using them as a sauce.

### Scrapple

7 cups water	3 teaspoons salt
2½ cups cornmeal	2 cups chopped meat

Make a mush of cornmeal. Add meat and cook two to three hours in a double boiler or fireless cooker. Put in a mold to cool. Slice and sauté in hot fat. Cracklings from fat rendering may be used in place of meat.

### Sausage and Bananas

Shape bulk sausage as croquettes or use link sausages. Cut bananas in two crosswise. Place in frying pan alternately with sausage. Cook slowly on top of stove or in oven, basting occasionally till bananas are done and slightly browned.

### Beef Heart

Wash heart, remove veins and arteries. Stuff with dressing and sew or tie. Roll in flour, sprinkle with salt, and brown in hot fat. Place in casserole, add water to half cover, and cook slowly two hours. Turn once or twice during cooking. When done, thicken liquid and season for gravy. The heart may be cut in small pieces and cooked with rice or potatoes as a casserole dish. Other vegetables, such as onion, carrot, green pepper, celery, may be added.

### Dressing

1 cup stale Victory bread crumbs	$\frac{1}{8}$ teaspoon pepper
2 tablespoons fat	Few drops onion juice
$\frac{1}{4}$ teaspoon salt	$\frac{1}{4}$ - $\frac{1}{3}$ cup hot water

### Calves' Brains

Soak one hour in cold water. Remove membrane and parboil twenty minutes in salted water to which a little vinegar or lemon juice has been added. Drain and put in cold water. When cold, separate in small pieces. Use as sweetbreads in various ways as follows:

1. Add chopped celery, green pepper, pimiento, and mix with mayonnaise. Serve on lettuce.
2. Reheat in medium thick white sauce and serve in timbale cases or with mashed potato rosettes. Mushrooms may be added.
3. Mix in a fritter batter. Fry by dropping by spoonfuls in deep fat or sauté in greased muffin rings arranged in a frying pan.

### Fritter Batter

$\frac{1}{2}$ cup flour	$\frac{1}{4}$ - $\frac{1}{3}$ cup milk
1 teaspoon baking powder	1 egg
$\frac{1}{8}$ teaspoon salt	

### Minced Kidney on Toast

Trim kidneys, removing white fat from center, cut in thin slices, dredge with flour, and sauté with a thinly sliced onion. Other seasonings, such as green pepper and celery salt, may be added to the gravy. When brown, add one pint water or stock. Simmer gently for five minutes. More flour may be needed to thicken the gravy. Serve on Victory bread toast or with mashed potatoes. Kidneys should be cooked only a short time, or they become toughened.

### Jellied Veal

Have a knuckle of veal divided into small pieces (bone should be sawed). Put in kettle and cover with boiling water. For seasonings, add onion, a bit of bay leaf, summer savory, thyme, and marjoram. Cook slowly until tender. Strain off liquid and concentrate to about one to one and one-half cups, depending upon the amount of meat. Separate meat from any gristle and cut into small pieces. Put slices of hard cooked egg in the bottom of a mold. Put over them a little liquid and allow to set to hold in place. Add a layer of

seasoned veal, mixed with celery and chopped parsley, alternately with a layer of hard cooked eggs. Press meat, pour over liquid, and chill. If meat containing little bone and connective tissue is used, gelatin may be added to liquid to insure its forming a firm loaf when chilled.

### Mutton Fat for Cooking<sup>1</sup>

2 parts mutton fat  
1 part lard

½ pint whole milk to every  
2 pounds mixed fat

Heat mutton fat and leaf lard, which have been put thru a meat grinder, together in a double boiler with the milk. The fat is rendered and when allowed to cool, forms a cake which is removed from the surface of the liquid. When small amounts are rendered, the liquid may be lost thru evaporation.

### Savory Fat<sup>1</sup>

1 pound mutton fat  
1 onion

1 teaspoon ground thyme or  
mixed herbs tied in small cloth  
1 sour apple

Heat at low temperature until apple and onion are thoroly browned. Strain off fat. This may be used in place of butter or fat in frying or on vegetables.

### Use of Mutton Fat

In making gravies, it is more satisfactory to combine flour and mutton fat and then add the liquid than to add flour to the liquid for thickening. Mutton fat is useful in white sauces for combining croquette ingredients or in tomato sauces.

## INDIVIDUAL WEEKLY CONSUMPTION OF MEAT

United States, 1915, average consumption, 3¾ pounds  
England and the allies, 1918, compulsory ration, 1¼ pounds  
Germany, 1918, compulsory ration, ½ pound

Can we do as well as England and France? Can we, on a voluntary ration, find one and one-fourth pounds of meat, not including fish and poultry, per person per week enough?

## SUGGESTIONS FOR SAVING MEAT

Buy smaller quantities  
Prepare smaller quantities  
Eat smaller quantities

Use more milk and milk products  
Use more vegetables  
Use meat substitutes  
Use meat extenders

<sup>1</sup>Bulletin 526, "Mutton and its value in the diet," United States Department of Agriculture.

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- Published by the United States Department of Agriculture, Washington, D. C.  
Bulletin 526, Mutton and its value in the diet  
Bulletin 391, Economical use of meat in the home  
Leaflet 5, Make a little meat go a long way
- Published by the Agricultural Experiment Station, University of Illinois, Urbana  
Circular 206, Essentials in the selection of beef
- Published by the State Council of Defense, 120 West Adams Street, Chicago  
Official recipe book, price ten cents
- 

**If we don't like potato without meat at home, would we in the trenches? Let us be sure the soldiers have meat.**

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## LOYALTY DEMANDS THAT WE ALL

SAVE!            LOAN!            GIVE!            WORK!            FIGHT  
Save food!    Save fuel!    Save money!

We must feed the allies as well as ourselves. The ships and munitions factories need the coal. The Government needs the money.

*Loan!* Loan your money to the Government. A Liberty Bond is a certificate of your faith in the justice of the cause for which we are fighting.

*Give!* Give generously to relieve the sufferings of the destitute and to add to the comforts and happiness of the victims of the war, and to make things as easy as possible in camp for our own boys. Give to as many of the authorized organizations and causes as you can. They are too numerous to mention separately, but some are known to us all, so

Give to the Red Cross!  
Give to the Army Y. M. C. A.!  
Give to the Knights of Columbus!

and to all other authorized worthy organizations and movements for the cause.

*Work!* Work in the Red Cross! Work in the field or the garden! Work at whatever you can find to do to help win the war!

*Fight!* Fight if you can. It is in man's cause and God's.



# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

JULY 22, 1918

No. 47

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois under the Act of August 24, 1912]

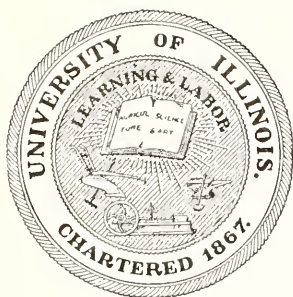
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## SUGAR IN WAR TIME

By

VIOLA J. ANDERSON

Instructor in Household Science



PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA

Of all the sweets available, why use here the one which is needed abroad

# SUGAR IN WAR TIME

## THE SITUATION

Due largely to lack of ships the stores of sugar in the United States have materially decreased. The largest part of our cane sugar comes from Cuba, Porto Rico, and Hawaii, and while some beet sugar has been produced in the United States, it does not yet constitute more than twenty-two percent of the total sugar used. The shortage in England, France, and Italy is much more serious than in the United States, because of the greater distances to be covered in the transportation of cane sugar, and because the beet sugar industry in France, which supplied all her sugar needs and even allowed her to export a little, was paralyzed at once at the beginning of the war. Ninety-five percent of the sugar beet factories in France were in the territory first occupied by the enemy in 1914 and 1915.

The amount of sugar used in the United States has been enormous, and is increasing from year to year. A comparison between our consumption per capita in 1917 and in former years is shown in the following table, and, for further comparison, the sugar rations of the allies for the present year are included. This does not seem to show a fair division among friends.

### YEARLY PER CAPITA CONSUMPTION OF SUGAR IN THE UNITED STATES

1892-93.....	60.70 pounds	1907-08.....	74.11 pounds
1897-98.....	47.55 pounds	1912-13.....	85.04 pounds
1902-03.....	78.92 pounds	1917-18.....	84.35 pounds

### WEEKLY ALLOWANCES OF SUGAR AMONG THE ALLIES IN 1918

Italy <sup>1</sup> .....	$\frac{1}{4}$ pound	England .....	$\frac{1}{2}$ pound
France .....	$\frac{1}{4}$ pound	United States <sup>2</sup> .....	$\frac{3}{4}$ pound

1. Less than this is actually used. The ration limits the wealthy, while the poorer classes doubtless get very little.
2. Amount suggested by the Food Administration.

## MEETING THE SITUATION

Manufacturers in the United States who use sugar are limited in most cases to eighty percent of their pre-war supply. In the home we can easily set for ourselves a lower limit than this. The Food Administration suggests a ration of three-fourths of a pound per person per week.

Many sweets can be used that do not contain granulated sugar, such as fresh and dried fruits, corn and maple sirups, maple sugar, honey, molasses. The most important of these at present is corn sirup.

The sugar in these sweets has the same food value as granulated sugar, and their flavors make them more, rather than less, desirable.

*Give the children plenty of fruit.*

*Serve dates, figs, prunes, raisins, and use them in cooking.*

*Use fruits and salads, instead of puddings and pastries.*

*Sweeten desserts with sirups. Use sirups with canned fruits, preserves, and jellies.*

*When candy is eaten, let it be marshmallows, gum drops and glacéd nuts, rather than chocolate creams and bonbons.*

## RECIPES

In these recipes, substitutes for wheat flour—corn, potato, oats, barley, rice—should be used, as usual. Use mixtures found successful in other recipes.

For fats other than butter, use oleo and vegetable fats, or with spiced puddings and cookies, clarified drippings from meats.

### GENERAL DIRECTIONS FOR THE USE OF SIRUPS IN BAKING

It is possible to bake without using any granulated sugar. Corn sirup, honey, maple sugar, maple sirup, and molasses will sweeten muffins, cakes, and cookies. In using corn sirup, however, it is well to remember that it contains some water, and its sugars are less sweet than granulated sugar. When using one cup of this sirup, the liquid called for by the recipes may be reduced by approximately one-fourth cup. One cup of the sirup will have a little less sweeten power than three-fourths of a cup of sugar. In the very sweet cakes it is not satisfactory to use all sirup and no sugar. The product is very gummy, and falls. However, one cup of sirup may be used to one and three-fourths cups of flour with fair success. In some of the following recipes three-fifths of a cup of sirup has been allowed to two-fifths of a cup of sugar, since this is found to give very good results.

The sweetening power of honey is practically equal to that of sugar, cup for cup. A little less than one-fourth of a cup of liquid should be subtracted from the recipe for each cup of honey used. Since honey is acid, soda should be used, as with molasses, but it is seldom necessary to allow more than one-fourth teaspoonful of soda to one cup of honey.

### GRIDDLE CAKES

1½ cups flour (corn, rice, barley)	2 tablespoons corn sirup
3 teaspoons baking powder	1 egg
1 teaspoon salt	1 tablespoon fat
1¼ cups milk	

Mix and sift dry ingredients. Add milk, sirup, and beaten egg, mixed together, and then add the melted fat.

Griddle cakes made with sirups brown unusually well.

### MUFFINS

2 tablespoons melted fat	1 cup mashed potato
2 tablespoons corn sirup	1 cup corn meal
1 egg, well beaten	4 teaspoons baking powder
1 cup milk	1 teaspoon salt

Mix in order given.

The batter should be a little stiffer than batter for wheat muffins.

### YELLOW HONEY CAKES

¼ cup fat	¼ teaspoon soda
¾ cup honey	1 teaspoon baking powder
2 eggs	⅛ teaspoon salt
1/3 cup milk	½ teaspoon flavoring
1½ cups flour (barley, rice, corn)	

Heat the fat, honey, and milk until blended. Add yolks, and when cool, the dry ingredients, mixed and sifted together. Add flavoring. Cut and fold in the beaten whites. Bake in a moderate oven for thirty to forty minutes.

### HONEY DEVIL'S FOOD

¼ cup fat	½ cup milk
1 cup honey	1¾ cups barley or other flour
2 squares chocolate	½ teaspoon soda
1 egg	1 teaspoon baking powder
⅛ teaspoon salt	

Heat the fat, honey, and chocolate until blended. Add yolks, and when cool, the milk and sifted dry ingredients, alternately. Fold in the beaten whites. Bake in a moderate oven forty minutes.

### FOUNDATION CAKE

$\frac{1}{4}$ cup fat	2 eggs
$\frac{3}{5}$ cup sirup	$1\frac{3}{4}$ cups flour (barley, rice, corn)
$\frac{2}{5}$ cup sugar	2 teaspoons baking powder
$\frac{1}{3}$ cup milk	$\frac{1}{16}$ teaspoon salt

Cream the fat, and mix thoroly with the corn sirup, sugar, and eggs. Add dry ingredients, mixed and sifted together. Pour into an oiled pan, and bake in a moderate oven for half an hour.

Vanilla, almond, chocolate, or other flavoring, chopped nuts, or chopped dates, may be added to this foundation.

Sirup may replace all the sugar. The cake will be of poorer texture, but a fair product.

### STEAMED PUDDING

$\frac{1}{4}$ cup fat	$\frac{3}{4}$ cup flour (rice or corn)
$\frac{1}{2}$ cup corn sirup	$\frac{1}{3}$ teaspoon soda
1 egg	$\frac{1}{4}$ teaspoon salt
$\frac{1}{2}$ cup graham flour	$\frac{2}{3}$ cup raisins, figs, or dates

Cream the fat, and mix thoroly with the corn sirup and egg. Add dry ingredients mixed and sifted together, and the dried fruit. Turn into an oiled mold, cover, and steam two and one-half hours.

### GINGERBREAD

1 cup molasses	$1\frac{1}{2}$ teaspoon ginger
$\frac{1}{2}$ cup boiling water	$\frac{1}{2}$ teaspoon salt
$\frac{2}{4}$ cup flour (rice, barley, corn)	4 tablespoons fat
1 teaspoon soda	1 egg, well beaten

Blend molasses with water. Add dry ingredients, mixed and sifted together. Add egg and melted fat. Beat well. Bake in a moderate oven.

### SPICE COOKIES

$\frac{1}{4}$ cup fat	$\frac{1}{2}$ teaspoon baking powder
$\frac{1}{2}$ cup corn sirup	$\frac{1}{4}$ cup raisins
1 egg	$\frac{1}{2}$ teaspoon cinnamon
$\frac{1}{4}$ cup, or more, flour (rice, barley, corn)	$\frac{1}{8}$ teaspoon clove, mace, nutmeg

Mix in order given. Enough flour should be used to make a stiff dough. Roll to one-eighth inch in thickness, cut, and bake in moderate oven.

### MAPLE ICING

$\frac{3}{4}$ cup maple sirup	1 egg white
$\frac{1}{4}$ cup corn sirup	beaten until stiff

Cook the mixture of sirups until a long thread forms, when it is dropped from the spoon. Pour slowly over egg white, beat until smooth and stiff, and spread over cake.

### MAPLE CREAM

2 cups maple sugar	Pinch of salt
$\frac{3}{4}$ cup milk	1 tablespoon butter

Cook sugar, milk, and salt together, until a soft ball forms when tried in cold water, or until thermometer registers  $113^{\circ}\text{C}$ . Cool slightly, and then beat until creamy. Chopped nuts may be added.

### ROLLED FRUIT

1 pound dates	$\frac{1}{4}$ pound nut meats
$\frac{2}{3}$ cup raisins	2 tablespoons orange juice

Wash fruit, stone the dates, and put fruit with nuts thru a meat chopper. Blend thoroly with orange juice. Let stand for twenty-four hours. Mold into shape. Shapes may be rolled in a little granulated sugar or grated cocconut which has been dried and slightly browned in the oven.

### STUFFED PRUNES

Select sweet prunes. Soak over night. Dry, open carefully, remove stones, and stuff with chopped raisins and nuts. Roll in granulated sugar.

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

AUGUST 1, 1918

No. 48

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois  
under the Act of August 24, 1912]

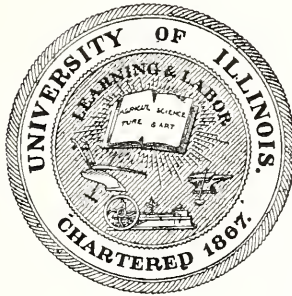
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## THE GREAT CONDITION

By

DAVID KINLEY

Professor of Economics



PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA

This pamphlet contains the substance of an address given before the Illinois Veterinary Association July 10, 1918.

## THE GREAT CONDITION

“There can be but one issue. The settlement must be final. There can be no compromise.”—PRESIDENT WILSON

Peace that is not conclusive is not worth having. The conclusiveness of peace depends on the attainment of the righteous purpose of the war. Peace terms proposed in the hope that mere cessation of war and bloodshed will satisfy the combatants or restore harmony and goodwill, are futile and foolish. The loss of a life, or of a million lives, is not the worst thing that could happen to the world. There are things more precious than life.

If these statements are true, and I take it that we all agree that they are, the flabby peace-monger is worse than foolish. He is dangerous. He asks for peace not to establish principle but to avoid danger and trouble and unsightliness. His moral sense is perverted. His scale of moral values is unsound. He would stroke the back of the hissing rattlesnake because of the mottled beauty of its skin. He would pacify the untamed tiger by scratching his ears and offering him a bit of the raw beef he is struggling for. The snake may respond to the patting. The tiger will seek to fill his stomach with more meat, even though it be that of the peace offerer himself.

The people among us who say they wish peace may be grouped roughly into three classes; the “peace at any price” people; the “peace by discussion” people; and the “peace by principle” people.

The first group, again, includes several sub-groups. There are, in the first place, some sincere souls who look on war and bloodshed as wrong in themselves and believe that no end which these can attain can be justifiable, because of the sinfulness of the means. They are children horrified by a nightmare and do no harm excepting when, like children, they get in our way. Because they can make the tiger purr with their music when his belly is full, they think they can do it when he is roused by hunger,

Then there are the cowards—not many among us, thank God!

—who would rather risk a master's lash than the loss of a hand or the sight of bloodshed.

Beside them is the traitor who lauds the beauties of peace because his purse is filled and he is false to the nation that has befriended him. The undeveloped, the coward, and the traitor are all in this group together.

The peace by discussion people are also peace by compromise people and are found chiefly among those who think that they enhance their reputations for being judicial, by proclaiming that in a contest like this there surely must be wrong and right on both sides. They are long on pose but short on facts. They emphasize the iniquity of Great Britain towards the American colonies, but forget to mention the establishment of the South African Federation. They have nothing to say about the moral magnanimity of America in freeing Cuba but much about her treatment of the Indians and the iniquities of the Mexican War. Some of them tell us that they lived long in Germany and never saw any exhibition of the evil spirit that the world is now condemning in Germany.

This group has its organs of expression largely in certain eastern journals. One of these journals recently discussed the problem of peace terms and suggested that if Germany and her allies would withdraw from Belgium and France, give Belgium proper indemnity to restore her ravaged territory, and withdraw her armies from the other territories which she now occupies, it would be fair to restore her colonies and cry quits. The writer argued that we would thus have restored conditions to what they were before the war, and that, therefore, nobody would have lost. These people are deeply impressed with the highly moral talk of the German government as seen, for example, in the German reply to the Pope's peace proposals of some months ago. The German government is said to have agreed with Pope Benedict "that in the future, the material power of arms must be superseded by the moral power of right." But shall we be content to let a highway robber go free because when he is caught by superior force in his robbery he offers to restore what he has taken and go about his business? Is it not our duty to see to it that he changes his business or is put under limitations which will make its future pursuit impossible? It is true, as the *New York Tribune* has remarked, that "the outlaw and outcast is willing to be reinstated in a new society of nations,



but only on his own terms, which include no sackcloth and ashes on his part for the infamies of the past."

We cannot plumb the depths of the futility of the "peace by discussion" proposals without an understanding of the German peace proposals. In Germany, as elsewhere, there are various groups of "would-be peace makers." There are some in Germany who talk of peace without annexation and would give back to all belligerents the territory which they had at the outbreak of the war, provided Germany be left with a consolidated influence or power over Central Europe and the Near East. There are those who would restore the Pre-War status in territory and let each belligerent and victim bear its own burden of rehabilitation. A large party demands the increase of German sea-power with seaports on the coast of Belgium and France, and the coal mining districts of the latter. Another demands the realization of the dream of "mittel Europa." Another adds to this the dream of "Berlin to Bagdad." Others insist on the restoration of a colonial empire, not in the scattered fragments which made up the colonies which she has lost, but in a solid block of territory and people from the East to the West coast of Africa, so that in the years to come Germany could arm millions of black men and, from that vantage point, once more reach out for the domination of the world. There are others who would be content with annexations of Russian territory. Be it noted that some, if not all, of these programs include freedom of the seas—FOR GERMANY—meaning that Germany must have coaling stations and a fleet such that no other power would dare attack her. Then Germany must have a controlling influence in South America, and that continent must be open to her colonists to live in and keep up their duty to their home country. To the Pan-Germans who look westward, the enemy has been Great Britain. To those who look eastward, the great enemy was Russia. To both, the great enemy has now become America.

The real import of the "peace by understanding and discussion" proposition is shown by the statement of Paul Lensch, a German Socialist, made only last October. He declares that such a peace "would be for Great Britain the greatest defeat in its history and the beginning of its ruin." Again, he tells us that Germany has a great and immense advantage "in the fact that Germany will have won the war, if she does not lose it, whereas England will have lost the war if she does not win it." That was written, note you, at the

time when our efforts were regarded as negligible, and the same remark will now apply to us. This same writer tells his countrymen that they are too impatient. He warns them that it will be a score or more of years before the economic and political disintegration which the war has started will show themselves. "Then", he tells us, "the true time of harvest will have come." Being pious, as well as patriotic, he also tells his fellowcountrymen that the Biblical phrase applies in their case,—“Seek ye first the kingdom of God, and all these things shall be added unto you”. “First bring about the peace by understanding, which guarantees German political independence, territorial integrity and freedom of economic development, then Germany will have shown herself so strong that all these things shall be added unto her.”

These are the views of various parties in the German Empire. The government, while neither expressly accepting nor rejecting any of the programs has held itself in a position to adopt any or all of them according to the military conditions at the close of the war. In other words, the peace proposals of the German government have varied inversely with their military successes. We have become accustomed to see a German peace offensive follow a failure of German military offensive, but in the intervals of German military success the spirit and intention of the government appears to have been on the side of the extremest demands that any one of the parties of the people has made. The military party in Germany, the German autocracy, the German government, will undoubtedly adopt as its program of peace conditions *the program of the most extreme party which it feels sure it can get*. Hence it is that the German reply to the Pope's note, for example, like all their other peace propositions, was general and vague. On certain matters, however, the government has made its views evident. For example, Germany must have economic privileges in Belgium and must dominate Belgian policy, if Belgium is restored at all. As the Chancellor said to Mr. Gerard, “We must possibly have the forts of Liege and Namur. We must have other forts and garrisons throughout Belgium. We must have possession of the railroad lines. We must have possession of the ports and other means of communication. The Belgians will not be allowed to maintain an army, but we must be allowed to retain a large army in Belgium. We must have commercial control of Belgium.”

But on one point the government and the separate groups of

people in Germany are all agreed. It is that the settlement of the war shall secure enlarged power and increased resources for Germany at the expense of somebody. Along with this declaration goes the refusal, sometimes tacit and sometimes expressed, to admit that her aggression on her neighbors for her own aggrandizement is wrong and must not be repeated. The consideration of this point brings us to a discussion of the aims of the third group of peace advocates mentioned at the beginning, the "peace by principle" people.

This group of our own people, comprising without doubt a vast majority of those who desire to see peace re-established, are those who take the ground that the primary condition of the restoration of peace is the establishment of a certain fundamental principle of political morality which Germany has violated. Variousy phrased, this principle is that might does not make right in international dealings any more than in individual affairs; that no nation may now commit with impunity, acts of aggression upon its neighbors; that civilization may not again be trampled on in war by outrages that break down centuries of progress of law and order; that war, even if it must be waged, shall not be carried on under a policy of frightfulness, an attempt to terrorize the world by murder, outrage, and destruction. To establish the principle thus variously expressed, is the GREAT CONDITION of peace. To end the war without establishing this principle, either by Germany's voluntary acceptance of it or her compulsory submission to it, will be to lose the war. To fail to establish this principle, at any price in blood and wealth, will be simply to give a breathing space to the forces of evil to become stronger for a second effort to bring the world under the domination of the opposite principle.

On this matter we cannot be too clear, too specific, too emphatic, too determined. The only terms of peace which America and her Allies can accept or even listen to, for the sake, I will not say of justice only, but of their own national existence, are terms which acknowledge and give expression to this great principle. In other words, the terms of peace must be such as to secure as far as possible in the future that no nation shall attempt, or prepare herself to attempt, to impose her will upon other nations, to destroy their liberty and independence, their economic and social order, their intellectual and moral consciousness, and their sentiment of nationality.

As remarked before, the position which some people take that if Germany will retire from the countries she has conquered and will provide for the economic restoration of devastated territory, we might well make peace, is fundamentally wrong, unless that restoration is made in the spirit of repentance for her evil deeds and as evidence of her full acceptance of the principle here described as the GREAT CONDITION. For, be it repeated, whatever indemnities may be paid; whatever restoration of territory may be made;—nay even if she were able to recall the dead to life and restore the population she has murdered; if she were able to collect the ashes and gases into which by her destruction she has dissipated the accumulated wealth of ages; even if she were able to restore all the conditions that prevailed before the war both within her own boundaries and elsewhere;—we shall have failed to win the war unless in addition Germany freely accepts or is compelled to submit to this Great Condition. Well would it be if by some miracle the people of Germany could have a change of heart that would lead them to accept this principle and give evidence of their repentance, by such restoration as I have just described. But there is no evidence of such a spirit of repentance or even of regret. On the contrary, they tell us that France shall be bled white, that the power of Great Britain shall be broken and the Empire dismembered, so that neither may ever again be able to strike a blow against similar oppression.

At this point one plea, to which some people urge attention, needs consideration. They say that we must not be bitter in our condemnation, nor seek to impose on Germany terms which will humiliate her, because, after all, this war, like many others, is impersonal. They tell us that it is the clash of two rival economic and cultural systems. They remind us of the American civil war as an example of a conflict between two systems of economic order and civilization. But the parallel is not true. The Civil War was, as some other wars have been, a conflict between two rival, irreconcilable systems of life which grew up as a result of the environment in which their people lived, without conscious purpose on the part of either to injure the other.

The main difference between the present war and other wars, from this point of view, is that no other war in history has been produced by a conflict of systems one of which was consciously, deliberately, adopted as a national policy for the very purpose of

producing a war that would enhance the aggrandizement of the aggressor. But it is established beyond cavil that for two generations, or more, German policy has been shaped to this end. Upon Germany, therefore, rests the moral responsibility for the iniquity. She cannot claim even an equal division of the guilt on the ground that the war is a clash of economic and cultural systems, for she molded her system to produce the war.

The illustration, however, happily serves to teach a lesson of a different kind. The Civil War *was* such a conflict of differing social organizations. The principles on which these two organizations respectively rested were so different that only one could survive. They could not exist side by side. The conflict could not be settled by compromise or discussion. There could be no negotiated peace. President Lincoln was not deluded on this point. He knew that "Rebellion not crushed would be rebellion triumphant." The same is true in the present crisis. The system of government for which militaristic, autocratic Germany stands cannot exist side by side with democracy. One must be crushed if the other is to survive. Let us not deceive ourselves on this matter. If the Allies permit the survival of an autocracy powerful enough to begin another world war, it will destroy civilization. Never can the world be safe for democracy. Therefore, there can be no peace in this conflict by compromise or negotiation or discussion. One system of political and economic organization or the other must go down to complete defeat. We must so punish this autocracy and crush its spirit that at least for generations to come it will not rear its head again.

But, say some kindly people, this is unchristian and wrong; we shall drive the German people to hate us, whereas we should try to win them over. While we may readily acknowledge the force and kindness of this view, we shall make a mistake if we permit it to have any influence with us. Have the past four years not shown abundantly that the only condition under which Germany will not hate the world after this war is that she shall be successful? But her success is the very thing which must be prevented if the principle of autocracy is to be destroyed. We must face the fact that after this war Germany will hate the world and that her people will be an obstacle to every attempt at world progress, just as for years the bitterness between North and South stood in the way of that consolidation and harmony necessary to the perfect welding of our national unity. The generations "to come must contend with the

“suleness of a conquered foe”, and this war will not be ended, however or whenever it closes, until, fifty or seventy-five years from now, bitterness is forgotten and the spirit of “live and let live” is accepted by all the nations concerned, those who are beaten as well as those who win.

But how shall we know? How can we tell whether and when Germany either accepts or submits to the great condition that autocracy must be destroyed and the principle of self-determination and self-government, the principle that right makes might, established and obeyed? The answer is that, “By their fruits ye shall know them.” If Germany were to accept the principle, she would of her own free will do the things which the Allies have outlined as necessary to a settlement. She would renounce annexations and restore devastation. Of her own free will she would atone for murder, outrage and destruction. She would restore to those whom she has despoiled. She would do penance for the murders she has committed. But there is no likelihood that she will do these things of her own free will and so show that she accepts in humility the condition that is imperative. There is nothing to do but compel her to submit. Certainly our own President made every attempt to induce the German government to accept the principle willingly. But even he at last was, as he said, disillusioned and came to the conclusion that the only remedy was force, force without stint, force to the limit,—and so it must be.

The concrete expression of submission to the Great Condition, the destruction of the principle of autocracy and acceptance of the principle of the right of a people to determine its own life and its own government, can be assured, of course, only through the imposition of specific terms of peace. What are some of the things that will make sure the establishment of the Great Condition?

1. The first is a victory which will drive the Germans and their allies back within the boundaries of their own countries. Whether or not there was a time when a proposal for a peace without victory could have been reasonably entertained, it has passed.

2. Germany must restore and indemnify Belgium.

3. Germany and her allies must evacuate all the other territory which they have conquered and occupied—Russia, Roumania, Servia, Montenegro, France and Luxemburg.

4. Alsace-Lorraine must be restored to France and the Trentino and Trieste to Italy.

5. Turkish rule must be limited to Turks only.

6. The individual violators of humanity and law, those who have been responsible for and those who have actually committed, the acts of murder and personal outrage in Belgium, France, Russia, Poland, Servia and Armenia, must be punished.

7. The Balkan question must be settled as far as possible "by friendly counsel along historically established lines of allegiance and nationality", and international guarantees of their stability and independence must be given by a council of the nations.

8. Poland must be restored.

9. There must be readjustments of frontiers in proper cases so as reasonably to consolidate national groups and afford due national resources.

10. Germany's colonies may be restored to her only if adequate guarantees are secured (1) that they will not be made hatching grounds for plots against her neighbors; (2) that the consent of the people and those of neighboring communities shall be secured; (3) that she shall not organize in them armies of natives; (4) that the colonies will be governed in the interests of the people of the colonies and not for exploitation. She should not be left in a position in Africa in which, for example, she can again check the "Cape to Cairo" Railway.

11. Germany must restore that part of the world's shipping which she has *illegally* destroyed.

12. All nations must agree to reduce armaments, both military and naval.

13. An international court of justice must be established to which all the participants in this war, and as many others as possible, shall agree to submit their disputes for a reasonable time before making preparation to settle them by arms.

14. By a similar agreement at the close of the war, there should be established a League of Nations to enforce agreements and to prevent treaties in the future from becoming scraps of paper.

"For such arrangements and covenants, we are willing to fight and to continue to fight until they are achieved." They are characterized by principles of justice and recognize the right of all nations, great and small, to "live on equal terms of liberty and safety."

It is of the highest importance that the people of the country should understand clearly the necessity of insisting that the war

shall go on until this principle which I have called the Great Condition is securely established; that the power of autocracy shall be finally broken; that no government, or people, or nation, may, with impunity, aggrandize itself through the destruction of the liberties and rights and property of another government, or people, or nation. It is of the highest importance that we shall develop throughout the country a public spirit that will not yield on this point, but will insist on attaining our purpose; so that, if by any possibility dark days come and weak-kneed people join in clamor to be relieved from the frightful strain of the war by a settlement which will not establish this principle, the people of America will sternly refuse and will push out of their way all who impede them in the attainment of this mighty purpose, and insist that our Government shall stand for this Great Condition as the essential of lasting peace.

“There must be no hugger-mugger peace. It must be a real peace. . . . Germany has waged three wars, and each time she has added through those wars to her strength, to her power, and each successive war she has waged has inevitably encouraged her on to the next. If she had had one check you would not have had this war. If this war succeeds in adding one square yard to her territory, of adding one cubit to her stature, of adding a single iota to her strength, it will simply raise their idea of militarism for which the world is being sacrificed at the present moment.”

HON. LLOYDE GEORGE



# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV.

AUGUST 5, 1918

No. 49

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the act of August 24, 1912]

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## THE GERMAN WAR CODE

By

**JAMES WILFORD GARNER**

Professor of Political Science



**PUBLISHED BY THE UNIVERSITY OF ILLINOIS**

**UNDER DIRECTION OF THE WAR COMMITTEE**

**URBANA**

**1918**



# THE GERMAN WAR CODE

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A comparison of the German Manual of the Laws of War with those of the United States, Great Britain, and France and with the Hague Convention Respecting the Laws and Customs of War on Land.

By JAMES W. GARNER

Professor of Political Science in the  
University of Illinois

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PUBLISHED BY THE UNIVERSITY

Under Direction of the War Committee

Urbana, Illinois

1918

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## INTRODUCTORY REMARKS

If we compare the rules which regulate the conduct of war today with those of a century ago, we shall be struck by one notable difference: namely, the latter were for the most part unwritten, that is to say, they consisted in the main of a body of custom and tradition the evidence of which was found in the treatises of text writers and in the decisions of the courts, whereas those of today are for the most part written and are to be found either in manuals issued by governments for the guidance of their commanders in the field, or in international conventions and declarations which have been ratified by the great body of states.<sup>1</sup> The rights and duties of belligerents are therefore no longer left entirely to the arbitrary determination of commanders but they are limited by definite written rules formulated either by their own governments or by international conferences representing the various powers. The former, of course, are binding only upon the armies of the government which issues them; the latter are binding on all belligerents whose governments have ratified the conventions in which they are found.

The starting point in the process by which this change was brought about was the promulgation by President Lincoln in 1863 of General Orders No. 100, entitled "Instructions for the Government of the Armies of the United States in the Field." These "Instructions," as is well known, were prepared by a distinguished German-American publicist, Dr. Francis Lieber, who had served under Blücher at Waterloo but who in early life, to escape the oppression of his own country, had come to America and for many years was a professor in South Carolina College and later a professor in Columbia University.<sup>2</sup> They were not only the first notable example of a written code of war law ever issued by a government, but they were permeated through and through by a spirit of humanity; they were praised by the international jurists of Europe and they exerted a marked influence upon the subsequent development of the laws of war.<sup>3</sup> They remained in force until the year 1914, when they were superseded by a new code, entitled *The Rules of Land Warfare*, which was largely a revision of Lieber's "Instructions."<sup>4</sup>

The obvious advantages to a nation at war in having the rules which it proposes to observe in the conduct of hostilities reduced to

<sup>1</sup>Compare Holland, "The Laws of War on Land," p. 1, and Renault, "War and the Law of Nations," *American Journal of International Law*, January, 1915, pp. 1ff.

<sup>2</sup>The imperative need during the Civil War for a written code for the guidance of the military commanders, many of whom were quite unfamiliar with the customs and usages of warfare, is well stated by General Geo. W. Davis in his "Elements of International Law," third edition, pp. 499-500.

<sup>3</sup>Compare Spaight, "War Rights on Land," p. 14; Martens, *La Paix et la Guerre*, p. 77; Merignhac, *Les Lois et Coutumes de la Guerre sur Terre*, p. 21; and Davis, "Dr. Francis Lieber's Instructions for the Government of the United States Armies in the Field," *American Journal of International Law*, Vol. I, pp. 22ff.

<sup>4</sup>The authors of the *Rules of 1914* say that "everything vital" in Lieber's "Instructions" has been incorporated in the new manual. Certain obsolete provisions were of course omitted, while many new rules made necessary by the Geneva, the Hague and other international conventions were added.

written form in order that commanders and troops may know definitely their rights and duties and thus avoid, through ignorance or uncertainty, infractions of the law of nations soon impressed other governments, and a goodly number of them accordingly followed the example of the United States and issued manuals of instructions for the guidance of their commanders and troops during war.<sup>1</sup> The failure of many states, however, to follow this course caused the first Hague Peace Conference of 1899 to adopt a rule imposing upon the contracting parties to the Convention respecting the laws and customs of war on land an obligation to issue instructions to their armed land forces, which instructions were required to be *in conformity with the regulations governing land warfare annexed to the said Convention*,<sup>2</sup> and this obligation was reaffirmed by the corresponding Convention of 1907.<sup>3</sup>

The first government to act in pursuance of the obligation thus imposed was that of the German Empire, which in 1902 promulgated a manual entitled *Kriegsbrauch im Landkriege*, prepared by the Great General Staff of the German army.<sup>4</sup> The British government had already in 1884 issued a *Manual of Military Law*, prepared by a group of distinguished jurists and military officers. It has been frequently revised and brought into harmony with the great international conventions and declarations, the last edition having appeared in the year 1914.<sup>5</sup> The essential part of it, namely, the chapter on the "Laws and Usages of War on Land," was prepared by Colonel Edmonds of the British army and by Dr. L. Oppenheim, Whewell Professor of International Law at Cambridge. The French government likewise in pursuance of the obligation imposed by the Hague Convention has issued a manual of rules and instructions prepared by Lieutenant Robert Jacomet, the fourth edition of which appeared in 1913.<sup>6</sup> Lieber's "Instructions" of 1863 still being in force the government of the United States did not consider it necessary to issue a new manual, but in 1914 the earlier manual was revised and brought into harmony with the Hague and other international conventions and was issued under the title *Rules of Land Warfare*.<sup>7</sup>

In this study an attempt is made to compare the German manual with those of the United States, Great Britain, and France and

<sup>1</sup>The character of some of these earlier manuals is discussed by Holland in his "Studies on International Law," ch. 4, and by Merignhac in his *Les Lois de la Guerre Continentale*, pp. 4ff.

<sup>2</sup>Article I.

<sup>3</sup>Article I.

<sup>4</sup>*Kriegsbrauch im Landkriege* (*Kriegsgeschichtliche Einzelschriften Herausgegeben vom Grossen Generalstabe*, Hef 31, Berlin, 1902). The *Kriegsbrauch* has been translated into French by M. Paul Carpentier under the title *Les Lois de la Guerre Continentale: Publication du Grand Etat-Major Allemand* (Paris, 2d ed., 1916) and a very fair and impartial analysis of it has been made by the well known French writer Merignhac, under the title *Les Théories du Grand Etat-Major Allemand sur les Lois de la Guerre Continentale* (Paris, 1907). An English translation has been made by Professor J. H. Morgan of University College, London, and published under the title *The War Book of the German General Staff* (New York, 1915). In the preparation of this study I have used the English translation by Morgan and the French translation by Carpentier, carefully comparing them on all points discussed.

<sup>5</sup>Published under the authority of His Majesty's Stationery Office. Pp. 908 (London, Wyman & Sons, 1914).

<sup>6</sup>*Les Lois de la Guerre Continentale, Préface de M. Louis Renault, Publié Sous la Direction de la Section historique de l'Etat-Major de l'Armée* (Paris, Pedone, 1913).

<sup>7</sup>Approved by the Chief of Staff, and issued by order of the Secretary of War April 25, 1914. Washington: Government Printing Office, 1914.

with the Hague Convention of 1907 respecting the laws and customs of war on land in respect to the more important points concerning which there is a difference, and to call attention to the instances of nonconformity of the German manual to the Hague regulations and the established usages of land warfare. Some attempt is also made by reference to German juristic authority and German practise to show that the code of the General Staff, extreme as many of its provisions are, is entirely in accord with the notions of the nature, objects, and methods of war generally held in Germany and applied in practice.

## THE LAWS OF WAR ON LAND IN GENERAL

The Hague conference of 1899, with a view to revising the general laws and a customs of war and of defining them with greater precision for the purpose of mitigating their severity as far as possible, and inspired by the desire to diminish the evils of war as far as military necessity permits,<sup>1</sup> adopted a series of regulations setting forth the rights and duties of belligerents and prescribing various rules to be observed by them in the conduct of war on land.<sup>2</sup> This convention was readopted in revised and expanded form by the Second Hague Conference in 1907; and both were ratified by the governments of the four powers whose military manuals are here compared.<sup>3</sup> As stated above, an obligation was laid upon the contracting parties to issue manuals of instructions for the guidance and information of their military commanders, and it was expressly required that these instructions should be in conformity with the rules and regulations governing land warfare, which were annexed to the convention. The American, British, and French manuals appear to conform in every respect to this requirement. At the outset they mention by title the great international conventions and declarations adopted at St. Petersburg, Geneva, and the Hague and declare that they constitute "true international law" and as such are binding upon states and upon their military commanders.<sup>4</sup> The manuals of the United States and France in particular incorporate the texts of these conventions and declarations and in the main their rules are literal reproductions of those found in the international conventions, with such amplifica-

<sup>1</sup>See the Preamble to the Convention Respecting the Laws and Customs of War on Land.

<sup>2</sup>It being impossible, however, to agree upon regulations covering all cases which might arise during the course of war, the Conference took the precaution to add that in all cases not covered by the regulations it was not intended that military commanders should be left to their arbitrary judgment but that until a more complete code of the rules of war should be issued the inhabitants and the belligerents "should remain under the protection and the rule of the principles of the law of nations as they result from the usages established among civilized peoples, from the laws of humanity and the dictates of the public conscience."

<sup>3</sup>In consequence of the so-called "general participation" clause (Art. 2) in the Convention of 1907 it is, technically speaking, not binding on any of the belligerents in the present war since five of them have never ratified it. Nevertheless, such of its provisions as are merely *declaratory* of the existing laws and customs of war (and most of them belong to this class) are binding independently of the status of the Convention, as much so as any other established customary rule of international law. Cf. Spaight, "War Rights on Land," p. 12, and Martens, *La Paix et la Guerre*, p. 240. Moreover the Convention of 1899 to which all the belligerents in the present war are parties, and of which the Convention of 1907 is mainly a revision, is binding on all of them, since it was declared to remain in force as between the powers not ratifying the Convention of 1907. Cf. Scott in the *American Journal of International Law*, January, 1915, p. 193. This view is admitted by German writers. Cf. e.g. Zittelmann in *Deutschland und der Weltkrieg* (English translation published under the title "Modern Germany", p. 604.

<sup>4</sup>American Rules, Art. 7; British manual, Art. 4; French manual, p. 24.

tions and explanations as seemed desirable. A careful comparison of the rules which the American, British, and French manuals lay down fails to reveal a single important instance of nonconformity to the regulations of the Hague Convention. The latter are cited in connection with every question covered by the manuals, they are always referred to with respect, and occasionally, as in the French manual, military commanders are enjoined to interpret them liberally in the interests of the rights of the inhabitants of occupied territory. Finally, the authors of the American and British manuals, in particular, frequently cite in support of the principles which they lay down the opinions of distinguished modern writers on international law and refer to the more enlightened practices in recent wars as evidence of the best usage today.

In these respects the German manual forms a striking contrast to those of the United States, Great Britain, and France. This manual was framed entirely by a body of high military officers, distinguished alike for their extreme views of military necessity and for their evident contempt for the opinions of civilian jurists and academic writers on international law, to whom they frequently refer as impractical theorists and overzealous humanitarians. The authority of no great non-German master on international law is or could be invoked in support of the extreme views which the General Staff sets forth in its manual.<sup>1</sup> Not even their own more modern and liberal jurists like Bluntschli, Geffcken, and von Liszt are appealed to, their main reliance being upon the older militaristic writers such as Dahn, von Hartmann, von Moltke, Bismarck, Loening, and Leuder, whose views for the most part were in accord with those of the General Staff. Whenever a German writer could be found who supported the views of the General Staff he is quoted; those who are opposed are passed over in silence. Although intended as a code of instructions, the German manual abounds in bitter and for the most part unfounded charges against the French for having violated the laws of war in 1870-71, and it goes out of the way to defend the German armies for acts which have been condemned not only by nearly every writer outside of Germany but even by high German authorities themselves.<sup>2</sup> Indeed, the conduct of the Germans during the war of 1870-71 was, we are told, characterised by unusual tenderness and consideration for the rights of the inhabitants of the districts occupied by the German armies. Wherever possible the practices of remote wars, and especially those of the Napoleonic wars, are invoked and relied upon in support of the extreme views of the General Staff, rather than the more enlightened and humane usages of recent wars.

<sup>1</sup>The solitary exception being the Belgian jurist Rolin Jacquemyns who in two articles published in the *Revue Générale du Droit International et de Législation Comparée* (Vols. II and III) attempted to justify certain acts of the Germans in 1870-71, which have been almost universally condemned by writers on international law outside Germany.

Such acts, for example, as the levying of heavy fines on French communes for offenses committed by Frenchmen in distant communes and even for such acts as Graf Renard's threat to shoot a number of civilians in case 500 laborers requisitioned by the German military authorities did not report for duty at a certain hour and place. See the *Kriegsbrauch*, English translation by Morgan, p. 154, and French translation by Carpentier, p. 112.



## ATTITUDE OF THE GERMAN MANUAL TOWARD THE HAGUE CONVENTION

But one of the most regrettable features of the German manual is the manner in which it ignores the great international conventions and especially that of the Hague respecting the laws of land warfare, which the German government solemnly ratified and to whose provisions all war manuals were required to conform. It neither reproduces them textually as do the American and French manuals, nor does it enumerate them by title with a statement that they constitute a body of rules binding upon states as well as upon their military commanders. One can scarcely determine from a reading of the German manual whether the rules of the Hague Convention were ever intended to bind belligerents in the conduct of war. In fact, they are rarely mentioned and when they are referred to it is usually in derision. A good many of its rules are clearly in conflict with the Convention and various regulations annexed to the Convention are cynically dismissed with the statement that they are excessively humane, or that they are good in theory but will never be observed by belligerents in practice, etc. The fact is, the General Staff does not look with favor upon the movement to reduce the law of war to written form, for the reason that the effect would be to limit the arbitrary powers of military commanders and thus to put an obstacle in the way of military success. It would prefer to see the commanders restricted only by traditions, usages, and customs, the exact meaning and application of which could be interpreted to meet the particular necessities of the moment.<sup>1</sup>

Adverting to the various attempts to define and reduce to written form the laws of war, through international agreement, the General Staff asserts that "all these attempts have hitherto, with some few exceptions, completely failed," and it adds that the "law of war" as the expression is understood is not a *lex scripta* introduced by international agreements, but only "a reciprocity of mutual agreement; a limitation of arbitrary behavior, which custom and conventionality, human friendliness and a calculating egoism have created, and for the observance of which there exists no express sanction, but only the fear of reprisals decides."<sup>2</sup> Such is the poor opinion which the General Staff has of the Hague and other great international conventions which the world after generations of effort has agreed upon with a view to regulating as far as possible the conduct of war and of diminishing its evils. They are nothing more than a body of moral prescriptions which will be observed, if at all, not because they have any legally binding effect, not through any desire to avoid the obloquy and odium which are always visited upon a civilized nation which will

<sup>1</sup>It will be recalled that at the second Hague Peace Conference, when Sir Ernest Satow was pressing for the adoption of rules restricting the employment of submarine mines, Germany's first delegate, Marschall von Bieberstein, made a powerful plea against binding belligerents by means of formal conventions and rules and in favor of leaving their conduct to be regulated only by conscience, good sense, the unwritten law of humanity, and the like. *Conférence Internationale de la Paix, Actes et Documents* T. III, p.382.

<sup>2</sup>Morgan, pp. 70-71; Carpentier, p. 4. See also the criticism of Merignhac, *op. cit.*, p. 46.

not keep its engagements, but simply through fear of reprisal on the part of the enemy who would be injured in consequence of their violation by its adversary. No evidence of such a standard of international obligation can be found in the American, British, or French manuals.

## THE OBJECT AND ENDS OF WAR

The idea that war is an evil, "the greatest of human evils," as Jefferson characterised it, a "plague to mankind," as Washington regarded it; that the manner of conducting it should be regulated by law in "the interests of humanity and the ever progressive needs of civilization," which was the predominating motive which avowedly animated the Hague Conferences;<sup>1</sup> that war is a contest between the armed forces, only, of the belligerents and not a contest between their peoples as such; and that consequently the "only legitimate object which states should endeavor to accomplish during war is to weaken the military forces of the enemy"<sup>2</sup> —are sentiments which apparently find no recognition in the German manual.

"A war conducted with energy," it tells us, "cannot be directed merely against the armed forces of the enemy state and the positions they occupy, but it will and must in like manner seek to destroy (*zerstoren*) the total moral (*geistig*) and material resources of the latter. Humanitarian claims, such as the rights of individuals [presumably noncombatants] and their property, can only be taken into consideration *in so far as the nature and objects of war permit.*"<sup>3</sup> In short, whenever the overcoming of the enemy may be facilitated thereby it is legitimate to direct the war against everything that goes to make up the *ensemble* of his *Kultur*: his education, art, science, finance, railroads, industry; even the established immunities of non-combatants and of private property fall to the ground, if respect for them stands in the way of the attainment of the object of the war, which, according to the *Kriegsbrauch*, means nothing less than the total destruction of the enemy's material and moral power. As is well known, this brutal doctrine was taken from the great oracle of the German militarists, von Moltke, who in a letter written in 1880 to Professor Bluntschli criticising his proposed code of international law in general and the Declaration of St. Petersburg in particular, said, "I can in no manner agree with the Declaration of St. Petersburg that the 'weakening of the armed forces of the enemy is the only legitimate object which states should endeavor to accomplish during war'; no, all auxiliary resources of the hostile government must be destroyed: its finances, railroads, necessaries of life, and even its prestige."<sup>4</sup> It is also in line with the teachings of von Clausewitz, Germany's first

<sup>1</sup>See the Preamble to the Convention Respecting the Laws and Customs of War on Land.

<sup>2</sup>So declared the Declaration of St. Petersburg of 1868, to which the North German Confederation was a signatory.

<sup>3</sup>Morgan, p. 68; Carpentier, p. 3.

<sup>4</sup>Helmuth von Moltke, *Gesammelte Schriften und Denkwürdigkeiten*, Vol. V, p. 196.

and greatest military writer, who advocated violence and terrorism as a means of reducing the enemy to submission, warned German commanders against the baleful theories of philanthropists and humanitarians who think war can be carried on in a civilized manner, and cynically referred to the usages of international law as "self-imposed restrictions, almost imperceptible and hardly worth mentioning."<sup>1</sup> A similar view of the nature and objects of war may be found in the writings of von Hartmann, von der Goltz, Bernhardt, and other German military writers. The doctrines of von Clausewitz and the General Staff have been brought up to date by Generals von Hindenburg, von Bissing, and others during the present war. Von Hindenburg, in an interview published in the Vienna *Neue Freie Presse* in November, 1914, said: "One cannot make war in a sentimental fashion. The more pitiless the conduct of the war, the more humane it is in reality, for it will run its course all the sooner. The war which of all wars is and must be the most humane is that which leads to peace with as little delay as possible."<sup>2</sup> Speaking on August 29, 1915, at Munster of the extreme measures which the Germans had felt obliged to take against the civil population of Belgium, General von Bissing said: "The innocent must suffer with the guilty. In the repression of infamy, human lives cannot be spared, and if isolated houses, flourishing villages and even entire towns are annihilated, that is regrettable but it must not excite ill-timed sentimentality. All this must not in our eyes weigh as much as the life of a single one of our brave soldiers. The rigorous accomplishment of duty is the emanation of a high *Kultur*, and in that, the population of the enemy country can learn a lesson from our army."<sup>3</sup>

## GERMAN THEORY AND PRACTICE IN REGARD TO HUMANITY IN WARFARE

Throughout the *Kriegsbrauch* there is a disposition to belittle the efforts which have had as their object the humanizing of war and the diminishing of its evils. Again and again they are declared to be inconsistent with the true nature and objects of war and those who have taken the leadership in such movements are referred to as misguided sentimentalists and theorists who erroneously assume that the conduct of war can be humanized. These humanitarian tendencies, we are told, have "frequently degenerated into sentimentality and flabby emotion" (*Sentimentalität und Gefühlsschwärmerei*) which are in "fundamental contradiction with the nature of war and its object." Soldiers are warned not to be misled by such tendencies and to take care to avoid the danger of arriving at "false conceptions concerning

<sup>1</sup>See his *Vom Kriege*, English translation by Colonel J. J. Graham (London, 1916), Vol. I, pp. 2-3.

<sup>2</sup>Reproduced in the *Berliner Tageblatt* of November 20, 1914, and quoted by Somville in his book, "The Road to Liège," p. xi.

<sup>3</sup>*Kölnische Zeitung*, September 8, 1914. English text in Langenhove, "The Growth of a Legend," p. 265, and in Somville, *op. cit.* p. 2. After his appointment as Governor-General of Belgium, von Bissing repeated in substance the above opinion to a Dutch journalist. The interview is published in the *Düsseldorf Anzeiger* of December 8, 1914.

the essential character of war" by "a profound study of war itself." "By steeping himself in military history an officer," we are assured, "will be able to guard against exaggerated humanitarian notions; he will learn therefrom that certain severities are indispensable to war, nay more, *that the only true humanity very often lies in a ruthless application of them.*"<sup>1</sup>

Here we have the German philosophy of the nature of war and the solemn duty of commanders to prosecute it ruthlessly and without regard to the principles of a mistaken humanitarianism. "The greatest kindness in war," said von Moltke, "is to bring it to a speedy conclusion."<sup>2</sup> The great object of war is to overcome the enemy, not simply the defeat of his armed forces. Ruthlessness, violence, terrorism, the destruction of his intellectual power, the appropriation of private property, even war against noncombatants—all are legitimate provided they contribute to the attainment of the object of the war. And if they serve to shorten the duration of the war, they are even praiseworthy, for "true humanity" consists in bringing it to a speedy termination.

German practice during the present war has been entirely in accord with this philosophy. If space permitted a thousand examples could be cited in illustration. The sacking or burning of hundreds of cities, towns, and villages in Belgium and France and the massacre of their inhabitants; the wanton devastation of extensive districts without military purpose; the shooting of innocent civilians as hostages; the deportation of hundreds of thousands of peaceful laborers to Germany for forced labor; the use of civilians as screens for protecting German troops against attack; the compelling of civilians to work in German munitions plants and other war industries; the murder on the high seas of more than 12,000 unoffending men, women, and children—all of them noncombatants and many of them neutrals; the poisoning of wells; the bombardment by land, sea, and air of peaceful and undefended towns and the killing of thousands of their noncombatant population; the destruction of cathedrals, churches, universities, libraries, art galleries, and ancient historical monuments; the spoliation of occupied regions by means of huge fines, contributions, and requisitions; the deliberate sinking without warning of hospital ships and Belgian Relief steamers—these are a few of a long list of acts every one of which is forbidden by the Hague Conventions, to say nothing of the sacred principles of humanity; yet they are defended in Germany as being in accord with the true philosophy of the nature and objects of war.

## MILITARY NECESSITY

The Hague Convention frankly admits that there are circumstances which permit a belligerent to disregard the established rules

<sup>1</sup>Morgan, pp. 71-72; Carpentier, pp. 6-7.

<sup>2</sup>Letter to Bluntschli cited above.

of international law,<sup>1</sup> and this principle is affirmed in the war manuals of most countries. All the great authorities on international law outside Germany, however, are in substantial agreement that the excuse of necessity is no justification for overriding the law unless conformity to its prescriptions would actually imperil the existence of the violating belligerent. The late Professor Westlake, than whom no greater or more highly respected authority ever lived, affirmed the generally admitted principle when he said that the doctrine of necessity was applicable only in cases of self-preservation and when the threatened injury or danger would not admit of the delay which the normal course of action would involve.<sup>2</sup> In short, there must be an actual case of necessity; mere considerations of convenience, utility, or strategical interest are not sufficient to justify a violation of the law.<sup>3</sup> The American *Rules of Land Warfare* even go to the length of affirming that military necessity does not admit of measures which are *forbidden by the modern laws and customs of war*.<sup>4</sup>

When we turn to the German manual, however, we find enunciated a very different theory of military necessity. This manual, following a doctrine long maintained by German writers, draws a distinction between what they call *Kriegsraison* and *Kriegsmanier*. The former, which may be translated as the "reason of war," permits a belligerent to adopt any measures and employ any means which will contribute to the attainment of the object of the war, even though they are forbidden by the customs or usages of war (*Kriegsmanier*).<sup>5</sup> This distinction between *Kriegsraison* and *Kriegsmanier* has generally been interpreted by writers outside Germany to mean that the laws and customs of war cease to be binding on a belligerent whenever their observance would hinder or defeat the attainment of the object of the war. *Kriegsraison geht vor Kriegsmanier* is an old and well-known German maxim;<sup>6</sup> that is to say, the duty to achieve military success takes precedence over the obligation to observe the law. Manifestly such a theory when carried out to its logical conclusion leads to the absolute supremacy of strategical interest as expressed in the ancient maxim, *omnia licere quae necessaria ad finem belli*. It is condemned by both the spirit and the letter of the Hague Convention;<sup>7</sup> it finds no recognition in the manuals of the United States,

<sup>1</sup>E. g. this is recognized by implication in the Preamble to the Convention Respecting the Laws and Customs of War on Land.

<sup>2</sup>"International Law," Vol. II, p. 114.

<sup>3</sup>Compare Rivier, *Principes du Droit des Gens*, Vol. I, p. 278; Hall, "International Law," 6th ed., p. 264; Oppenheim, "International Law," Vol. II, p. 177; and Hershey, "Essentials of International Public Law," p. 144.

<sup>4</sup>Art. 11.

<sup>5</sup>*Kriegsbrauch im Landkriege*, translation by Morgan, p. 69; trans. by Carpentier, p. 3. The distinction is fully explained by the German jurist Leuder in Holtzendorff's *Handbuch des Völkerrechts*, secs. 65-66. The distinction is emphasized by nearly all German writers, see e. g. von Clausewitz, *op. cit.*; von Hartmann in two articles in the *Deutsche Rundschau* (Vols. XIII-XIV); von Moltke, *Gesammelte Schriften*, Band V, pp. 195ff; and von der Goltz, *Die Volk im Waffen*. Strupp, a high contemporary German authority, tells us that the distinction is founded on the supreme duty of the military commander to assure the successful termination of the war. "The provisions of the laws of war," he says, "may be disregarded whenever a violation appears to be the only means of carrying out an operation of war or even of preserving the armed forces, even if only a single soldier is concerned." See his *Das Internationale Landkriegsrecht*, p. 5; and an article by him in the *Zeitschrift für Völkerrecht*, Band VII, p. 363.

<sup>6</sup>Oppenheim, *op. cit.*, Vol. II, sec. 67.

<sup>7</sup>Art. 22.

Great Britain, or France, and it has been criticized by practically all writers outside Germany.<sup>1</sup>

German practice during the present war has been in accord with this theory of military necessity. At the very outset it was invoked by Bethmann Hollweg and Herr von Jagow in justification of the invasion of Belgium and subsequently it was appealed to by many of Germany's great and heretofore highly honored jurists like Kohler,<sup>2</sup> Niemeyer,<sup>3</sup> Schoenborn, Zittelmann, von Liszt, and others. Schoenborn, a distinguished professor in the University of Heidelberg, tells us that it was *absolutely necessary in the interest of self-preservation* for the German troops to go through Belgium; it was "a question of life and death" that Germany should forestall the action of the French, etc.<sup>4</sup> The attempt to justify the invasion of Belgium on the ground of military necessity is a good illustration of the extreme lengths to which the German theory of military necessity leads. Not the slightest evidence has ever been furnished by the German government or its apologists that France contemplated the invasion of Belgium.<sup>5</sup> Indeed, according to the admission of Bethmann Hollweg and von Jagow, it was the shortness of the distance through Belgium and the presence of French fortresses on the southern route that led Germany to send her troops through Belgium. It was not, therefore, a case of military necessity but merely considerations of convenience and strategical advantage which animated the German government. The only possible conclusion therefore is that if the plea of military necessity was a valid excuse for the German invasion of Belgium, any violation of the law which subserves a military interest may be justified on the same ground; and it is quite useless for states to enter into engagements to respect one another's rights, for in that case treaties will be nothing more than what Frederick the Great conceived them to be: namely, "works of filigree, more satisfying to the eye than of any utility."

This extreme theory which virtually identifies military necessity with military interest has been appealed to by the Germans as a defense for many other violations of the law of nations committed by them during the present war. It was the main excuse put forward for the frightful devastation of the Somme region in the spring of 1917, for the deportation of Belgian and French laborers, for the shooting of hostages, for the bombardment of undefended towns, for the atrocities committed by German submarines, for the burning of hundreds of Belgian and French towns and villages and the shooting

<sup>1</sup>See Westlake, "Collected Papers on International Law," pp. 243ff; Holland, "Laws of War on Land," p. 13; Bordwell, "Law of War," p. 5; Merignhac, *Les Lois et Coutumes de la Guerre*, p. 143; Nys, *Droit International*, Vol. III, p. 203; Pradier-Fodéré, *Traité de Droit International*, sec. 2740; and Pillet, *Lois de la Guerre*, sec. 59.

<sup>2</sup>See his article *Notwehr und Neutralität* in the *Zeitschrift für Völkerrecht*, Band VIII (1914), pp. 576ff.

<sup>3</sup>Article in the *Juristische Wochenschrift*, 1914, No. 16, reprinted in English in the *Michigan Law Review* for January, 1915.

<sup>4</sup>See his chapter on "Belgium's Neutrality" in a book entitled *Deutschland und der Weltkrieg*, p. 545.

<sup>5</sup>Mr. James Beck very aptly remarks that if Germany really had any evidence of such an intention on the part of France, it was the greatest tactical blunder that she did not permit France to carry out her intention because it would have furnished Germany with a justification of her own act which could never have been impeached. See his "Evidence in the Case," p. 229.

of their inhabitants, for the destruction of art galleries, historic monuments, educational buildings, and the like. In fact, wherever any possible military advantage could be subserved by measures forbidden by the laws and customs of war, the German armies have overridden the law and set up the plea of military necessity as an excuse.

## INSTRUMENTALITIES AND MEANS

The Hague Convention declares that the means which a belligerent may adopt in order to injure his enemy are not unlimited and among the instrumentalities and measures which it forbids are the use of poison and poisoned weapons, arms, projectiles, and materials calculated to cause unnecessary suffering, the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases, the use of expanding bullets, the compelling of the inhabitants to take part in military operations against their own country, assassination, the killing of prisoners, the destruction of property except when imperatively demanded by the necessities of the war, etc.<sup>1</sup> These prohibitions are all expressly incorporated in the war manuals of the United States, Great Britain, and France.

The German manual, however, declares that *all* measures may be employed to overcome the enemy which are necessary "to attain the object of the war" and that they include both "force and stratagem."<sup>2</sup> Again, "every means may be employed without which the object of the war cannot be attained; what must be rejected, on the other hand, is every act of violence and destruction which is not necessary to the attainment of this end." Again, "all means which modern inventions afford, including the most perfected, the most dangerous, and those which destroy most quickly the adversary *en masse* are permissible; and since these latter result most promptly in the attainment of the object of the war they must be considered as indispensable and, all things considered, they are the most humane."<sup>3</sup> Nevertheless, says the German manual, while *Kriegsraison* permits a belligerent to employ "all means of such nature to contribute to the attainment of the object of the war, practice has taught the advisability, in one's own interest, of employing with limits certain means and of renouncing completely certain others. Chivalrous and Christian spirit, the progress of civilization and especially the knowledge of one's own interest have led to voluntary relaxations the necessity of which has received the tacit assent of all states and of all armies."<sup>4</sup> It is quite clear that the authors of the German manual regard military effectiveness rather than considerations of humanity the test of the legitimacy of an instrument or measure. Therefore any instrumentality or method, the employment of which will contribute to the

<sup>1</sup>Convention Respecting the Laws and Customs of War on Land, Art. 22.

<sup>2</sup>Morgan, p. 84, translates the German words as "violence and cunning" but Carpentier, p. 20, more accurately renders them as "*la force et la ruse*."

<sup>3</sup>Morgan, p. 85; Carpentier, p. 21.

<sup>4</sup>Carpentier, p. 4; Morgan, p. 69.

speedy attainment of the object of the war, is permissible whether it is inhumane or results in unnecessary suffering to the enemy or not; and if its use results in the shortening of the duration of the war, it is for that reason the most humane.

This interpretation of the German manual becomes evident when we read it in connection with the theories enunciated by the German military text writers and in the light of German practice. Von Moltke, from whom the General Staff draws so much of its philosophy and inspiration, tells us that "the great benefit in war is that it *should be terminated as soon as possible*." To this end it is permissible to employ "all means except those which are positively condemned" (*Dazu müssen alle, nicht geradezu verwerfliche Mittel, freistehen*).<sup>1</sup> This is also the view of von Clausewitz already quoted, of von Hartmann, and of many recent German generals and military writers. Von Hartmann, who many years ago was requested by the Prussian minister of war to combat the liberal and humane views set forth in the honored Bluntschli's code, wrote a series of articles for the *Deutsche Rundschau*<sup>2</sup> in which he laid down the propositions that war today must be conducted with rigor, and with greater violence and less scruple than in the past; that every means without restriction must be employed;<sup>3</sup> that the "shackles of a constraining legality" in the conduct of war only serve to paralyze belligerents and postpone the termination of hostilities;<sup>4</sup> that humanity in war has a place only so long as it does not hinder the speedy attainment of the object of the war;<sup>5</sup> that when war breaks out terrorism becomes a principle of military necessity,<sup>6</sup> etc. General Colmar von der Goltz quotes with approval von Clausewitz's sneering reference to the philanthropists and humanitarians and lays down the proposition that it is permissible to employ "all means, material and intellectual, to overcome the adversary."<sup>7</sup> Somewhat similar views have been expressed by Generals von Blume,<sup>8</sup> Bernhardi,<sup>9</sup> von Hindenburg,<sup>10</sup> von Bissing<sup>11</sup> and other military writers.

This view of means and measures is not confined to the military writers but it is held by German statesmen and writers on international law. Thus the Imperial Chancellor in an address to the *Reichstag* in March, 1916, declared that "every means that is calculated to shorten the war constitutes the most humane policy to follow. When the most ruthless methods are considered best calculated to lead us to victory, and a swift victory, I said, then they must be employed." Again, in a note of January 31, 1917, addressed to the Secretary of State, the German Ambassador at Washington,

<sup>1</sup>Letter to Bluntschli. Moltke, *Gesammelte Schriften und Denkwürdigkeiten*, Band V, pp. 194-197.

<sup>2</sup>Entitled *Militärische Notwendigkeit und Humanität*, Vols. XIII-XIV (1877-1878).

<sup>3</sup>*Ibid.*, Vol. XIV, pp. 76, 89.

<sup>4</sup>*Ibid.*, Vol. XIII, pp. 119, 122.

<sup>5</sup>*Ibid.*, p. 466.

<sup>6</sup>*Ibid.*, pp. 459-462.

<sup>7</sup>See his book *Die Volk im Waffen*, French translation entitled *La Nation Armée*, by E. Jaeglé, pp. 3, 7.

<sup>8</sup>See his book *Die Strategie* (2d ed., 1886).

<sup>9</sup>*Vom Heutigen Kriege* (1912) and *Deutschland und der nächste Krieg* (1912).

<sup>10</sup>Quoted above.

<sup>11</sup>Quoted above.



defending Germany's resumption of unrestricted submarine warfare, declared that Germany was "now compelled to continue the fight for existence with the *full employment of all the weapons which are at its disposal.*"<sup>1</sup>

German practice during the present war has been in accord with this theory of means and instrumentalities. A hundred examples could be cited in illustration. They include the employment of submarine torpedoes for the destruction of merchant vessels, although submarines are totally without accommodations for saving crews and passengers, the use of poisonous gases, the poisoning of wells in South Africa, the use of explosive shells, the use of civilians as screens to protect German troops against attack, the bombardment of undefended towns, the putting to death of hostages, the devastation of the Somme region, the destruction of towns and villages for the acts of individuals, and many others.

### THE RIGHT OF SELF-DEFENSE

The Hague Convention lays down certain conditions as to organization and insignia which must be fulfilled by troops in order to entitle them to the treatment accorded lawful combatants, in case they are captured by the enemy. Thus they are required to be commanded by a responsible officer, and to bear a distinctive sign or emblem recognizable at a distance. But in order to enable the inhabitants of a place not yet occupied by the enemy to rise spontaneously with a view to beating off an invader, the Convention goes on to declare that in case they have not had sufficient time to organize and provide themselves with uniforms they shall nevertheless be regarded as lawful combatants and entitled, if captured, to the treatment accorded prisoners of war, provided only that they carry their arms openly and respect the laws and customs of war.<sup>2</sup> In short, they are exempt from the obligation to have a responsible commander and to be clothed in uniform. This provision was a concession to states which do not have large standing armies and was intended to legalize the *levée en masse* as a means of defense against an invader. It is incorporated textually in the manuals of the United States, Great Britain, and France, and the British and French manuals add that the rule should be liberally interpreted by belligerents since it is the first duty of a people to defend themselves against invasion and if they do so loyally they should not be treated as criminals.<sup>3</sup> But the right of self-defense thus recognized and affirmed by the Hague Convention is in effect denied by the German manual, which declares that the right of the inhabitants of an invaded district to take up arms and repel an invader can be admitted only when they have an organization and a responsible leader, and wear emblems recognizable at a distance.<sup>4</sup> This in face of the fact that the Hague Convention

<sup>1</sup>Official text published by the Department of State.

<sup>2</sup>Article 2.

<sup>3</sup>British manual, Art. 30; French manual, Art. 5.

<sup>4</sup>Morgan, p. 83; Carpentier, p. 18.

requires the provisions of war manuals to conform to the rules of the Convention, to which the German government is itself a party.

During the present war German military commanders in Belgium appear to have admitted the binding force of the above-mentioned article which the *Kriegsbrauch* repudiates, but in fact the right of self-defense which it proclaims was generally refused to the Belgian population on the alleged ground that they had ample opportunity to effect an organization and provide themselves with uniforms before the arrival of the German armies.<sup>1</sup> Belgian civilians therefore who took up arms and attempted to resist the advance of the Germans were whenever captured summarily shot as *francs-tireurs*. Considering the rapidity of the German advance into Belgium during the first days of the invasion, if the contention of the Germans that the civil population had ample time to effect an organization and equip themselves with uniforms be admitted, it is difficult to conceive a situation such as that which the Hague Convention contemplates, when the inhabitants may lawfully rise and resist an invader without incurring the penalty reserved for *francs-tireurs*.

Not only did the Germans refuse to treat all such persons as lawful combatants, but they even declined to treat as lawful belligerents the members of the Belgian *garde civique*, a militia force not very different from the German *landsturm*, organized long before the outbreak of the war for purposes of defense, and commanded by regular army officers and equipped with a distinctive uniform. All were treated as *francs-tireurs* when captured and were summarily shot. At least Belgian writers so claim. In fact, the Germans according to their own admission proceeded on the theory that they were at war with the whole Belgian population; that the contest was on the part of the Belgians an "unorganized peoples war" and that only the members of the regular Belgian army were entitled to the treatment reserved for prisoners of war.<sup>2</sup>

## TREATMENT OF PRISONERS AND HOSTAGES

The Hague Convention declares that prisoners must be humanely treated.<sup>3</sup> The American, British, and French manuals reproduce the text of this provision and further lay down the rule that prisoners may be put to death only for crimes punishable with death under the laws of the captor and after due trial and conviction.<sup>4</sup> The American and British manuals also take occasion to express doubt whether such extreme necessity can ever arise that will compel or warrant a

<sup>1</sup>See the German White Book, *Die Völkerrechtswidrige Führung*, etc., p. 4.

<sup>2</sup>See the German White Book referred to above; Grashoff *Belgiens Schuld*, ch. v, and Strupp *Die Belgische Volkskriege in der Zeitschrift für Völkerrecht*, Band IX (1915), pp. 281ff.

The case for the Belgians is set forth by the Belgian writers Waxweiler, "Belgium Neutral and Loyal," pp. 225ff; Dampierre, *L'Allemagne et le Droit des Gens*, pp. 190-191; Langenhove, "The Growth of a Legend," pp. 254ff; Massart, "Belgians under the German Eagle," p. 65; the report of the Belgian Official Commission of Inquiry ("Violations of the Rights of Nations in Belgium,") p. 97 and an official publication issued by the Belgian government entitled *Réponse au Livre Blanc Allemand*, pp. 10ff.

<sup>3</sup>Art. 4.

<sup>4</sup>American Rules, Art. 68; British manual, Art. 79; French manual, Art. 8.

military commander in killing his prisoners on the ground of self-preservation. The German manual, however, affirms the right of a captor to put his prisoners to death in case of "overwhelming necessity" and whenever the presence of the prisoners "constitutes a danger to the existence of the captor."<sup>1</sup> "The necessity of the war and the safety of the state," we are told, "are the first consideration rather than the unconditional freedom of the prisoners."

The Hague Convention contains no provisions in regard to hostages. The French manual, however, declares that it is forbidden as a general rule to demand or take hostages for the purpose of insuring the execution of conventions.<sup>2</sup> The British manual declares that the practice of taking hostages for such purposes is now "obsolete," and that it is preferable to "resort to territorial guarantees instead of taking hostages."<sup>3</sup> The American rules enumerate the purposes for which hostages have been taken in recent wars but express no opinion as to the legitimacy of the practice today.<sup>4</sup> The German manual, however, repudiates the assertion of certain "professors of the law of nations" that the taking of hostages has disappeared from the practice of civilized nations, and it defends the conduct of the Germans in 1870 in placing hostages on railway trains to insure the latter against derailment by the inhabitants, although it frankly admits that it was a "harsh and cruel" measure and that "every writer outside of Germany has stigmatized it as contrary to the law of nations and as unjustified towards the inhabitants of the country"; nevertheless it was legitimate, because it was effective in preventing a repetition of the acts.<sup>5</sup>

During the present war the Germans have resorted to the practice of hostage taking on a scale never before known in any war. In nearly every town, city, and village occupied by their forces the leading citizens were seized and the inhabitants notified that in case acts of hostility were committed by the civilian population the hostages would be shot.<sup>6</sup> Generally they were taken to insure the good behavior of the inhabitants, but the practice was also resorted to for various other purposes such as to insure compliance with the demands for requisitions, the payment of collective fines, to prevent acts of espionage, to insure railways, telegraph, and telephone lines against destruction, and the like. The hostages thus seized were usually confined as prisoners; sometimes they were led through the streets and required to warn their fellow citizens against committing acts of

<sup>1</sup>Morgan, p. 97; Carpentier, p. 36.

<sup>2</sup>Art. 92.

<sup>3</sup>Art. 461.

<sup>4</sup>Art. 387.

<sup>5</sup>Morgan, p. 156; Carpentier, p. 156. Lord Roberts issued a proclamation for a similar purpose in South Africa on June 19, 1900, but it was withdrawn eight days later. The measure was severely criticized by Mr. Bryce at the time and it is condemned by the British manual, Art. 463. Bonfils, Pillet, Hall, Westlake, Bordwell and indeed nearly all writers outside Germany, as the *Kriegsbrauch* admits, criticize it. It is even condemned by some German writers, notably by Bluntschli and Geffcken.

<sup>6</sup>The texts of many proclamations issued by German commanders to this effect may be found in the reports of the Belgian Commission of Inquiry, in the Report of the Bryce Commission, in the Report of the French Commission, in Davignon's "Belgium and Germany," in the Belgian document *Réponse au Livre Blanc Allemand*, in Massart, "Belgians under the German Eagle," in Waxweiler's "Belgium Neutral and Loyal," and numerous other publications official and private.

hostility; sometimes they were stationed on bridges to prevent their destruction by the enemy; not infrequently they were marched in front of German columns to protect them against attack; thousands were deported to Germany; occasionally they were put through the ordeal of sham executions and other forms of maltreatment as though they were criminals; and what seems almost incredible in this age, a goodly number were actually put to death as a penalty for acts committed or alleged to have been committed by the inhabitants. At Les Rivages, a suburb of Dinant, to refer to a single instance out of many, a large number of hostages who had been taken to insure a German detachment engaged in the construction of a pontoon bridge against attack were shot by the 101st Regiment. The German White Book admits the truth of the charge<sup>1</sup> but undertakes to defend this act in particular and the shooting of hostages in general on the principle that the mere taking of hostages and the holding of them as prisoners would prove ineffective in deterring the inhabitants from committing acts of hostility, if a belligerent were not allowed to inflict the death penalty for violation of the conditions for which they are taken.<sup>2</sup>

It is impossible to justify such an extreme and cruel measure. The American *Rules of Land Warfare* very justly remark that a hostage must be treated as a prisoner of war.<sup>3</sup> He cannot therefore be put to death or subjected to other severities than those which may lawfully be inflicted upon a regular military prisoner.<sup>4</sup> The right to put hostages to death was frequently asserted in earlier times, but it does not appear that it had ever in practice been exercised for at least a century prior to the present war.<sup>5</sup> Few measures resorted to by the Germans during the present war have illustrated more forcibly their extreme theories of military necessity or revealed German militarism in a worse light.

## REQUISITIONS OF SUPPLIES AND SERVICES

The laws of war allow an invader to take supplies from the country occupied by him, but the Hague Convention expressly declares that they may be taken only for "the needs of the army of occupation" and that, as far as possible, they shall be paid for in cash; and if this cannot be done, receipts shall be given and payment made as soon as possible.<sup>6</sup> This rule, in the identical language of the Hague

<sup>1</sup>See especially the testimony of Dr. Pretenz, a German Staff Surgeon, in *Die Völkerrechtswidrige Führung des Belgischen Volkskriegs*, anlage 51, and of Lt. Baron von Rochow, *ibid.*, anlage 47. It is stated in the Belgian *Réponse* (p. 220) that the total number shot was 90. Dr. Pretenz admits that among the number were several women and children.

<sup>2</sup>See the German White Book, "The Belgian Peoples War", pp. 67-68.  
<sup>3</sup>Art. 387.

<sup>4</sup>This is the opinion of practically all military writers. See e. g. Bluntschli, secs. 426 and 600; Hall, 4th ed., pp. 493-494; Pillet, *Les Lois Actuelles*, pp. 212-213.

<sup>5</sup>Merignac, however, states that the Germans in 1870 did put to death certain Frenchmen, presumably held as hostages, for the refusal or inability of their districts to pay contributions and fines imposed upon them and for certain acts committed against isolated Prussian soldiers. If his statement is true his own judgment that such a severity was "absolutely unworthy of a civilized people" will generally be accepted outside Germany. See his *Les Lois de la Guerre Continentale*, p. 33.

<sup>6</sup>Art. 52, Convention Respecting the Laws and Customs of War on Land.

Convention, is incorporated in the military manuals of the United States,<sup>1</sup> Great Britain,<sup>2</sup> and France.<sup>3</sup> The German manual, however, repudiates the rule of the Convention and declares that the "right of requisitioning *without payment* exists as much as ever and will certainly be claimed by the armies in the field, and also considering the size of modern armies must be claimed." It admits, however, that it has become the custom to furnish receipts; but it adds that the question of payment "will then be determined on the conclusion of peace,"<sup>4</sup> the inference being that payment will be made, if at all, out of an indemnity extracted from the vanquished belligerent and not by the requisitioning belligerent if he is the victor. The Hague Convention also lays down the rule that supplies requisitioned shall "be in proportion to the resources of the country;"<sup>5</sup> and the writers on international law outside Germany are all agreed that a belligerent may not exercise his power of requisition to such an extent as to reduce the inhabitants to destitution, but must leave them enough for their own subsistence. The *Kriegsbrauch*, however, does not accept this humane principle. The Hague rule, we are told, would be "willingly recognized by every one in theory, but it will scarcely ever be observed in practice. In cases of necessity the needs of the army will alone decide; and a man does well generally to make himself familiar with the reflection that, in the changing and stormy course of a war, observance of the regular procedure of peaceful times is, with the best will, impossible!"<sup>6</sup>

This has long been the doctrine of German military writers. Von Clausewitz in his day declared that the resource of requisition and contribution "has no limits *except those of exhaustion, impoverishment, and devastation of the country*";<sup>7</sup> that "war must support war" (*la guerre nourrit la guerre*, as the French translate the ancient maxim); that an invader has a right to live on the country, etc. Von Clausewitz even warned military commanders against the mistake of relying too much on "artificial means of subsistence," that is, of bringing their own supplies with them. This is also the doctrine of von Moltke who, in his letter to Bluntschli referred to above, declared that "the soldier who is exposed to suffering and privation, to exertion and danger, cannot be satisfied with requisitioning supplies in proportion to the resources of the country; no, he must take everything that is necessary to his existence."<sup>8</sup> This philosophy, summed up, means that since *Krieg ist Krieg* an invader is entitled to take the last mouthful of food, the last horse or cow, the last bushel of grain, and the noncombatant population may be left to starve if the occupying army needs the supplies thus taken.

<sup>1</sup>Art. 345.

<sup>2</sup>Art. 416 and note h. to the same article.

<sup>3</sup>Art. 103.

<sup>4</sup>Morgan, p. 175; Carpentier, p. 136.

<sup>5</sup>Art. 52.

<sup>6</sup>Morgan, p. 176; Carpentier, p. 138.

<sup>7</sup>*Vom Kriege*, English translation by Graham, Vol. II, p. 98. General von Hartmann defends substantially the same view. See his article in the *Deutsche Rundschau*, Vol. XIII, pp. 450, 458.

<sup>8</sup>*Gesammelte Schriften und Denkwürdigkeiten*, Vol. V, p. 195.

The Hague Convention allows an invader to requisition the services of laborers as well as supplies, but it expressly forbids the forcing of the inhabitants to perform work having any connection with "military operations" or to furnish the enemy with information concerning their own army or its means of defense.<sup>1</sup> This clearly forbids compulsory labor in munitions plants, or factories engaged in the manufacture of war materials generally, work on fortifications, the digging of trenches and the like, and it has generally been interpreted as forbidding the taking of forced guides.<sup>2</sup> But the German manual, on this point as on so many others, lays down a different rule. It frankly admits that the majority of writers of all nations have unanimously condemned the practice of compelling the inhabitants of occupied territory to furnish the occupant with information regarding their own army, its resources, military secrets, and the like, but, nevertheless, it adds, that this cruel measure "cannot be entirely dispensed with." Defending the right to force the inhabitants to serve as guides, the manual remarks that "whatever may be the horror aroused by the sentiments of humanity in requiring a man to commit an injury to his own country and indirectly to fight against his own troops, no belligerent operating in an enemy country can entirely renounce this expedient."<sup>3</sup> *Kriegsraison* may make it necessary. As to compelling the inhabitants to perform work in "military operations," it warns officers against a too elastic interpretation of this expression. Again, we are told, *Kriegsraison* must decide; which means that if an important military interest may be subserved by disregarding the prohibition, the obligation to conform to the rule ceases.

German practice during the present war has been in accord with the doctrine of the *Kriegsbrauch* rather than with the Hague Convention. In the occupied regions of Belgium and France supplies have been requisitioned without regard to the resources of the country; in many instances indeed it has amounted to sheer spoliation and pillage. One of the first acts of the Germans after establishing their occupation of Belgium was to take an elaborate inventory, by means of compulsory declarations, of the available stocks of everything which could be of use to the Germans and to prohibit the exportation of the same—except to Germany. Thereupon a wholesale system of requisition was inaugurated. Growing crops were requisitioned while still standing in the fields; live stock, farm implements, grain, raw materials, metals, manufactured articles, even the church bells were taken and many charges have been made by the Belgians that no payments were made, that bogus receipts were given, and the like. The Hague rule that requisitions can only be made for "the needs of the army of occupation" was flagrantly disregarded. Immense quantities of raw materials were taken away for use in the

<sup>1</sup>See articles 22 and 44 of the Convention Respecting the Laws and Customs of War on Land.

<sup>2</sup>See Spaight, *op. cit.*, p. 369; Westlake, *op. cit.*, Vol. II, pp. 101-102; Hershey, p. 141; Higgins, p. 269; Lawrence, p. 418; Pillet, *op. cit.*, p. 144. Even some German writers such as Loening, Strupp, Huber Meurer, and Zorn so interpret the prohibition. See also the American *Rules of Land Warfare*, Art. 322; the British manual, Art. 382, note d; and the French manual, Art. 95.

<sup>3</sup>Morgan, p. 153; Carpentier, p. 110.

home industries of Germany; millions of cattle and horses were similarly transported to Germany and sold to German farmers and stock raisers, even Belgian factories were dismantled of their machinery which was likewise carried off and installed in German factories. By no process of interpretation could it be said that such requisitions were for "the needs of the occupying army"; they were, in fact, for the maintenance of Germany's home industries—i.e., for a purpose the legitimacy of which is not recognized by the Hague Convention, the military manuals of other countries, or by any writer on international law outside Germany. In many cases the deposits in private banks and private pension funds in the post offices were seized and appropriated in violation of the express terms of the Hague Convention.<sup>1</sup> Finally, the services of thousands of Belgian laborers were requisitioned for work in munitions plants, in establishments for the manufacture of barbed wire and other war materials, for digging trenches, operating military railway trains, and even for guides.<sup>2</sup>

Such is the German theory and practice in respect to requisitions. It is in flagrant contradiction with the long-established customary laws of war, contrary to the express provisions of the Hague Convention, and it has been condemned by every authority on international law outside Germany and even by reputable German jurists.

## PECUNIARY CONTRIBUTIONS

The Hague Convention allows a military occupant not only to collect the taxes levied by the state in the territory occupied, but in addition it allows him to raise "other money contributions," subject to the condition, however, that the latter shall be levied "only for the needs of the army or for the administration of the territory in question."<sup>3</sup> This rule, with the limitation with which it is coupled, is incorporated in the manuals of the United States, Great Britain, and France. In order to leave no doubt as to the purpose for which such exactions may be made, the British manual takes the precaution to add that they may not be resorted to for the purpose of enriching the occupant or for the purpose of pressure or of punishment, and that they shall not be exorbitant in amount. It further adds that the chief purpose in allowing an occupant to levy such exactions on the inhabitants is to permit an equitable distribution of requisitions between towns and cities, on the one hand, and the country districts, on the other; money being contributed by the former to purchase supplies requisitioned of the latter.<sup>4</sup> This view of the nature and purpose of contributions is that generally held by the writers on inter-

<sup>1</sup>Art. 53.

<sup>2</sup>I have discussed at length German policy in respect to requisitions during the present war, in an article in the *American Journal of International Law* for January, 1917, pp. 74-112.

<sup>3</sup>Art. 49.

<sup>4</sup>Articles 423, 424. Article 107 of the French manual likewise adds that contributions imposed for self-enrichment or for weakening the enemy are prohibited.

national law everywhere,<sup>1</sup> at least outside Germany, and it is also the view of some reputable German authorities.<sup>2</sup>

The German manual itself admits that contributions cannot be levied for the "arbitrary enrichment" of the conqueror, nor for the purpose of recouping himself for the cost of the war, but it allows them to be levied for the purpose of punishment<sup>3</sup> and it does not take the trouble to say, as does the English manual, that they shall not be "exorbitant" in amount. In fact, German theory and practice have been in accord with the view that contributions are not merely levies on towns and cities as a substitute for requisitions in kind, that they are not limited to the needs of the occupying army or the administration, but that they may be exacted for the purpose of compelling the inhabitants to sue for peace, for the purpose of punishment, for covering the expenses of the war, and even for the enrichment of the occupant. Von Clausewitz, for example, declared that the first object of war is "invasion, that is, the occupation of the enemy's territory, not with a view to keeping it but *in order to levy contributions upon it or to devastate it*."<sup>4</sup> Von Moltke expressed essentially the same view in his letter to Bluntschli, referred to above. Loening, a high German authority, maintains that it is even legitimate for a military occupant to exact money contributions for the purpose of compelling the inhabitants to sue for peace,<sup>5</sup> and the distinguished Austrian publicist, Lammasch, defended this view at the first Hague Conference in 1899, although it found no favor there.<sup>6</sup> Other German writers maintain this extreme view universally condemned by all the authorities outside Germany and Austria.

German practice during the war of 1870-71 was in harmony with this view and it has been the same during the present war. During their occupation of France in 1870-71 they not only levied enormous contributions on cities, towns, and departments,<sup>7</sup>—so exorbitant in amount that many of them did not differ from sheer pillage except in name,<sup>8</sup>—but for the avowed purpose of breaking the resistance of the French people and inducing them to sue for peace, they levied in December, 1870, a per capita contribution of 25 francs on every inhabitant in the occupied districts of France. The German writer Loening admits that this expedient was "extraordinary," but he defends it on the ground that the "situation was none the less so," and

<sup>1</sup>Compare e.g. Spaight, *op. cit.*, p. 383.

<sup>2</sup>E.g. Bluntschli, who remarks that international law forbids the levying of contributions on the inhabitants of occupied territory except when they are *absolutely indispensable for the maintenance and needs of the occupying army*, *op. cit.*, sec. 654. So Leuder remarks that they are limited to the *urgent needs of the army* and the power to exact them must be strictly construed. Holtzendorff's *Handbuch des Völkerrechts*, Vol. IV, p. 503.

<sup>3</sup>Morgan, p. 178; Carpentier, p. 140.

<sup>4</sup>*Vom Kriege*, Graham's translation, Vol. I, p. 33.

<sup>5</sup>See his article in the *Revue de Droit International et de Législation Comparée*, Vol. V, p. 107.

<sup>6</sup>Quoted by the German writer Wehberg (*Capture in War on Land and Sea*, p. 42), who condemns the view that a belligerent may seek to induce his enemy to submit by exhausting him through the power to lay contributions and exact requisitions.

<sup>7</sup>I have given many examples in an article published in the *American Journal of International Law* for January, 1917, pp. 74-76.

<sup>8</sup>Cf. Latifi, "Effects of War on Private Property," p. 34.



that it was effective!<sup>1</sup> It is refreshing to be able to record, however, that this harsh and unjust measure, unanimously condemned by writers outside Germany, has not met with the approval of all reputable German authorities.<sup>2</sup> But the German manual assures us that the power of requisition and contribution as resorted to by the Germans was exercised "with the utmost tenderness for the inhabitants, even if in isolated cases excesses occurred"<sup>3</sup>

During the present war Belgium and France have been bled by huge contributions, the frequency and amount of which repel the assumption that they were levied only for the needs of the army and the expenses of the administration.<sup>4</sup> In addition to a general annual contribution of 480,000,000 francs levied on the occupied portion of Belgium in December, 1914,<sup>5</sup> which was subsequently increased to 720,000,000 and renewed each year since, huge contributions, often running into the millions, have been levied on scores if not hundreds of towns and cities in both Belgium and France. In addition to these exactions the Germans of course collected the regular taxes<sup>6</sup> and raised other huge sums under the guise of collective fines.

### COLLECTIVE FINES

The Hague Convention forbids the imposition of collective punishments, pecuniary or otherwise, upon the inhabitants of occupied territory on account of the acts of individuals for which they cannot be regarded as jointly and severally responsible.<sup>7</sup> This rule is incorporated in the war manuals of the United States,<sup>8</sup> Great Britain,<sup>9</sup> and France,<sup>10</sup> in the identical language in which it was formulated by the Hague Conference. The American manual interprets the rule to forbid collective punishments except for such offenses "as the community has committed or permitted to be committed," the inference being that the community cannot be punished for the acts of isolated individuals when the population as a whole is not an accomplice, either actively or passively, or for acts which the local authorities could not have prevented. If, for example, the act is committed by an isolated individual in the dead of night in a remote part of the town or district, under circumstances which make it impossible for the public authorities to have prevented it, or if there is no proof that the population as a whole was a party through either participation or sympathy, it would be a violation of the most elementary rules of

<sup>1</sup>See his article in the *Revue de Droit International et de Législation Comparée*, Vol. V, p. 108.

<sup>2</sup>It is condemned e.g. by Bluntschli (*op. cit.*, sec. 654), by Geffcken (ed. of Heffter, p. 30, note 4) and by Wehberg (*Capture in War on Land and Sea*, ch. iv).

<sup>3</sup>Morgan, p. 176; Carpentier, p. 138.

<sup>4</sup>I have given numerous examples in my article referred to above.

<sup>5</sup>The text of the order imposing this contribution may be found in Huberich and Speyer, "German Legislation in Belgium," 2d ser., p. 11.

<sup>6</sup>Not content with collecting the regular taxes on the inhabitants who remained in Belgium, General von Bissing by an order of Jan. 16, 1915, issued for the purpose of compelling the hundreds of thousands of Belgian refugees who had gone into exile in Holland and England to return to Belgium in order that their labor might be requisitioned by the Germans, gave notice that all Belgians who did not return by March 1 would be penalized by an additional levy equal to ten times the regular personal tax. Text in Huberich and Speyer, *op. cit.*, p. 41.

<sup>7</sup>Art. 50.

<sup>8</sup>Art. 354.

<sup>9</sup>Art. 385.

<sup>10</sup>Art. 109.

justice to hold the community responsible and subject it to punishment; and it is safe to say that the Hague Conference never intended to sanction the application of the principle of collective responsibility and punishment in such cases.<sup>1</sup>

The German manual does not deal with the subject of collective fines further than to say that they are the most effective means of insuring the obedience of the inhabitants of occupied territory.<sup>2</sup> It also remarks that they were frequently employed by the Germans during the Franco-German war of 1870-71, and the manual naturally attempts to defend the German practice. As is well known, huge fines were laid on many towns, cities, departments, and communes of France. The enormity of the amounts exacted and their disproportion to the offenses alleged are evidence enough that in many cases they were nothing more than contributions exacted under the guise of fines, and were imposed not as a punitive measure but merely for the enrichment of the military occupant.<sup>3</sup> The Germans even pushed the theory of collective responsibility to the length of fining remote communes, from which offenders originally came, for acts committed by them in other distant communes in the occupied portion of France.<sup>4</sup> This iniquitous theory of collective punishment is defended by the *Kriegsbrauch im Landkriege* and by most German writers on international law, mainly on the ground that it was effective in preventing a repetition of the acts complained of.<sup>5</sup> Leuder and the authors of the German manual find a justification also in the "embittered character which the war took on during its later stages."<sup>6</sup> Regarding the French complaint that the fines were in many cases grossly excessive and out of all proportion to the gravity of the offenses alleged, Leuder remarks that the promptness with which they were paid is evidence enough that they were "in truth not too exorbitant."<sup>7</sup> Leuder even goes to the length of asserting that a community may be fined for the continued persistence of the inhabitants in keeping up a futile struggle (*durch frivol fortgesetzte Kriege*). The 25 franc per capita fine levied in 1870 on all the inhabitants of the occupied regions of France for the purpose of breaking their spirit of resistance was therefore a justifiable measure.<sup>8</sup>

Such is the theory of the German manual and of German writers regarding collective punishments. It is criticized by practically every writer on international law outside Germany and even some

<sup>1</sup>Compare Lawrence, *op. cit.*, p. 447; Spaight, *op. cit.*, p. 408; Despagnet, *Cours de Droit International* secs. 587-588; Bordwell, "Law of War," p. 317; and Nys, *Le Droit International*, Vol. III, p. 429.

<sup>2</sup>Morgan, p. 178.

<sup>3</sup>Compare Bonfils *Manuel de Droit International*, sec. 1219. I have reviewed the German practice of 1870-71 and given many details as to the imposition of fines by the Germans, in an article in the *American Journal of International Law*, July, 1917, pp. 512ff.

<sup>4</sup>The text of the order putting into effect this extraordinary theory of collective responsibility may be found in the *Revue de Droit International et de Législation Comparée*, Vol. II, p. 666.

<sup>5</sup>See the defense by Loening in an article in the *Revue de Droit International et de Législation Comparée*, Vol. V, pp. 77ff.

<sup>6</sup>Leuder in Holtzendorff's *Handbuch des Völkerrechts*, Vol. IV, p. 508; also sec. 112, note 14M; organ, p. 178; Carpentier, p. 141.

<sup>7</sup>*Op. cit.*, p. 509.

<sup>8</sup>*Ibid.*, pp. 505 and 510. For a criticism of this extraordinary contention see Westlake, "Collected papers on International Law," p. 251.

German writers have condemned it.<sup>1</sup> It is likewise contrary to the rule of the Hague Convention and to the most elementary principles of the criminal law.

During the present war the Germans in both Belgium and France have proceeded on this theory on an even larger scale than they did in 1870-71. Scores of cities, towns, and communes have been punished by huge fines for offenses committed by individuals which the civil authorities were powerless to prevent and in which the population could not by any process of reasoning have been regarded as accomplices. In many cases the fines were out of all proportion to the gravity of the offenses alleged, leaving no doubt that in fact they were levied not as a punitive measure but for the purpose of enriching the military occupant and recouping himself for the cost of the war. In some cases they were levied on the inhabitants not for acts of the civil population but for acts committed by the regular armed forces of the enemy, which of course are not punishable by community fines since they are legitimate acts of war.

The city of Brussels, to cite a notable instance from many, has already been fined at least five times. It was fined 5,000,000 francs in November, 1914, for the act of a policeman in attacking a German officer during the course of a dispute between the two; again in July, 1915, it was fined 5,000,000 francs for the alleged destruction of a German Zeppelin by a British aviator near Brussels; in the same month it was fined 5,000,000 marks in consequence of a patriotic demonstration by the inhabitants on the occasion of the celebration of the national holiday (July 21); early in 1916 it was fined 500,000 marks on the charge that a crime had been committed in the suburb of Shaerbeek with a revolver obtained in Brussels where the possession of fire arms by the citizens had been forbidden by the military authorities; finally, in March, 1918, the city was fined 2,000,000 marks on account of a demonstration by anti-Flemish agitators. A fine of 60,000,000 francs was imposed on the province of Liège; 10,000,000 on the city of Liège; 3,000,000 on Tournai; 10,000,000 on Courtrai; 3,000,000 on Wavre; 500,000 on Lille; 650,000 on Lunéville, and scores of others.<sup>2</sup> Many towns were fined for the alleged firing of shots against German troops by civilian inhabitants; others were fined on account of the refusal of the municipal authorities to furnish the military commanders with lists of unemployed laborers whom the Germans were preparing to deport for forced labor in Germany; others were fined for inability to comply with requisitions; for the refusal of the inhabitants to work for the Germans; for the cutting of telephone wires, and the like.

In many instances these fines were in addition to other heavy exactions under the form of requisitions, contributions, and tax

<sup>1</sup>E.g. Bluntschli, *op. cit.*, sec. 643bis; and Geffcken, note 7 to sec. 126 of his edition of Heffter's *Le Droit International de l'Europe*.

<sup>2</sup>I have given the details regarding a good many other instances in the *American Journal of International Law* for July, 1917, pp. 515ff.

levies. As one reads the long list of such exactions and the reasons alleged for imposing them, it is difficult to avoid the conclusion that they were a part of the well-established German philosophy of war that an invader is entitled to live on the country which falls under his occupation and that the employment of any instrumentality or measure is legitimate whenever its use contributes "to the attainment of the object of the war."

## BOMBARDMENTS

The Hague Convention forbids the bombardment by whatever means of towns, villages, dwellings, or buildings which are undefended;<sup>1</sup> it requires the officer in command of an attacking force to do all in his power to warn the authorities before commencing a bombardment, except in cases of assault;<sup>2</sup> and it enjoins belligerents to spare as far as possible buildings dedicated to religion, art, science, or charitable purposes, historic monuments, and hospitals.<sup>3</sup> These rules are incorporated textually in the war manuals of the United States, Great Britain, and France.

The German manual, however, as it so often does, repudiates the Hague rule and declares that a preliminary notification of bombardment is not required in any case. The claims to the contrary put forward by some jurists are, we are told, absolutely contrary to the necessities of war and must be rejected by soldiers; moreover, the instances in which warning has been voluntarily given do not prove the existence of an obligation. The besieging commander must determine for himself whether the giving of preliminary notice will have the effect of endangering the success of his operations through the loss of precious time. If he is satisfied that it will have this effect he is not bound to give warning; if, on the contrary, he has nothing to fear from giving the notification, "conformity to the exigences of humanity" requires that it should be given.<sup>4</sup> In short, the duty of the belligerent in this as in other cases is determined not by considerations of humanity but by its effect upon the success of the military operations. The American rules add that while there is no rule requiring a besieging commander to allow women and children to be removed before the bombardment commences, it has been the American practice to allow them to leave and the manual reproduces the text of an order issued by General Noghi during the Russo-Japanese war giving permission to the women and children to leave Port Arthur before the bombardment commenced.<sup>5</sup> The text of the German manual does not differ from those of the other three countries in holding that no such obligation is incumbent upon a besieging commander, but it does not go to the length which the British manual does<sup>6</sup> of saying that considerations of humanity make it desirable if

<sup>1</sup>Art. 25.

<sup>2</sup>Art. 26.

<sup>3</sup>Art. 27.

<sup>4</sup>Morgan, p. 104; Carpentier, p. 45.

<sup>5</sup>American Rules, p. 68.

<sup>6</sup>Art. 127.

possible to permit the inhabitants to leave, nor does it call attention to the fact, as do the American rules, that the best recent practice is in favor of this humanitarian procedure. On the contrary, it asserts that the "pretensions of the professors of international law on this point must be deliberately rejected in principle as opposed to the principles of war," because the presence of the noncombatant population who must be fed from the supplies of the besieged may have the effect of hastening the surrender of the place. By refusing to allow them to leave, the besieging commander derives a military advantage and it would be foolish, therefore, for him to renounce voluntarily this advantage.<sup>1</sup>

Regarding the prohibition to bombard open towns and villages which are not occupied by the enemy or defended, the German manual takes occasion to say, somewhat cynically, that such a prohibition was indeed embodied in the Hague regulations but it was a "superfluous provision because the history of modern wars hardly knows of any such case."<sup>2</sup> In short, according to the view of the German manual, practically every town within the lines of the enemy is today a "defended" place and may therefore be bombarded. This extraordinary contention in effect reduces the prohibitions of the Hague Convention in respect to bombardment to a nullity and it is directly contrary to the views of practically all writers on international law as to what constitutes "defense." There is a general agreement among the text writers that a place is "undefended" and therefore exempt from bombardment if it possesses no means of defense or offers no resistance to the entrance of the enemy. If it is without fortifications or artillery or is unoccupied by troops, as many towns are in time of war, it cannot by any reasonable process of interpretation be said to be "defended."<sup>3</sup> The German manual, however, proceeds on the assumption that practically all towns in modern times possess the means of defending themselves against the enemy. If there are military stores, railway establishments, telegraph lines, or bridges in the town, this constitutes a sufficient excuse for bombarding it.<sup>4</sup>

In practice the Germans have during the present war proceeded in accord with the teachings of the *Kriegsbrauch*. They have bombarded many open and undefended towns in Belgium and France. In some cases these appear to have been technically defended in the sense of being occupied by troops, although without batteries; in other cases, such as the bombardment of the coast towns of Hartlepool, Whitby, Scarborough, and Yarmouth, there was not a soldier or a battery in the town. They were bombarded in the darkness of night without a word of warning; scores of women and children were killed, and hundreds of private houses were destroyed, when in fact

<sup>1</sup>Morgan, p. 107; Carpentier, p. 49.

<sup>2</sup>Morgan, p. 108; Carpentier, p. 50.

<sup>3</sup>Compare Holland, "Laws of War on Land," p. 30; Spaight, *op. cit.*, p. 158; Pillet, *Les Lois Actuelles*, p. 104; Bonfils, *Manuel*, secs. 1081-1082; Westlake, *op. cit.*, Vol. II, p. 315; Merignhac, *op. cit.*, p. 177.

<sup>4</sup>The British manual, Art. 118, expressly condemns this view as do the American Rules (Art. 212, note 1) which add that if it is necessary to destroy such objects it must be done by other means than bombardment.

no military purpose was subserved. As long ago as 1844 the Duke of Wellington, adverting to a recommendation of the Prince of Joinville's that in the event of war between France and England the undefended coast towns of England should be bombarded, declared that such a method of warfare had been "disclaimed by the civilized portions of mankind." He was right, but it remained for the Germans to revive it in the year 1915.

The injunction of the Hague Convention that in sieges and bombardments all necessary steps must be taken to spare as far as possible buildings dedicated to religion, art, science, or charitable purposes, historic monuments, hospitals, and the like has been systematically disregarded by the German military commanders during the present war. The destruction of the University of Louvain with its library of priceless treasures; of many beautiful historic city halls, some of them dating from the middle ages; of the cathedrals of Rheims, Malines, St. Quentin, Soissons, and Arras; the ancient Cloth Hall at Ypres completed in 1304 and one of the most exquisite examples of Gothic architecture in Europe; the historic Chateau de Coucy built in the thirteenth century; and scores of other ancient historic edifices—some of which like the Cathedral of Rheims belonged not to France alone but were in a real sense the property of all mankind—is evidence enough of the manner in which the injunction of the Hague Convention has been respected.<sup>1</sup> Brand Whitlock, American minister to Belgium, in a report made to the Department of State in 1917, declared that the only institutions scrupulously respected by the Germans in Belgium were the breweries. It is only just to the Germans, however, to assume that in some instances it was impossible for them to spare churches and historic monuments situated as they were in the center of the towns or cities which they had a lawful right to bombard, and it may be true that in some instances church towers were, as they charged, used for purposes of military observation by the enemy, although these charges have been emphatically denied by the Belgian and French authorities. But even if we admit the validity of the German excuse that the immunity of certain edifices from bombardment had been forfeited by their use for military observation and that it was impossible to spare others because of their situation, what justification can they offer for the destruction of buildings of this character after their armed forces had gained possession of the towns in which they were situated and effectively established their authority over the population? In fact, most of them were destroyed or damaged not through bombardment from the outside but were burned by the Germans while they were in full possession and consequently when there was no military justification for destroying them. Some of them, like the Castle of Coucy, were wantonly destroyed as a measure of devastation before the

<sup>1</sup>M. Malvey, French Minister of the Interior, in a report made by him in 1917 stated that 221 city halls of France had been damaged or wrecked by the Germans, 379 school buildings, 331 churches and 306 other structures of a public or semi-public character. Fifty-six of the buildings destroyed were classified as "historical" edifices. The number of such buildings destroyed or injured in Belgium was even larger.

retreat of the Germans and when no direct military object was subserved thereby. The war manuals of all countries condemn the destruction of such buildings except where it is absolutely required by the gravest military necessity.<sup>1</sup> Even the German manual declares that they must be spared and protected.<sup>2</sup>

## CONCLUSION

Such are the theories of the German war manual and such are some of the more important points of divergence between it and the manuals of the United States, Great Britain, and France and the Hague Convention. The statement of the London *Times* that "it is the first time in the history of mankind that a creed so revolting has been deliberately formulated by a great civilized state" may seem a little severe, but it can at least be said that the doctrines of the German manual on many points are absolutely in conflict with the liberal and enlightened views of practically all jurists and text writers outside Germany, contrary to many of the rules agreed upon by the powers represented at the Hague Conferences and formally embodied in the Convention Respecting the Laws and Customs of War on Land, and out of harmony with the whole spirit and progress of modern civilization. As such, the manual has been justly condemned by American, Belgian, English, and French writers on the laws of war, almost without exception.

It is but just to say, however, that some of its provisions are irreproachable and entirely in accord with the letter and spirit of the Hague Conventions as well as the generally recognized customs and usages of civilized warfare. Thus the manual declares that belligerents are bound to respect the inviolability of neutral territory and that if a belligerent trespasses upon the territory of a neutral state the latter may resist such a violation with all the means in its power;<sup>3</sup> that an occupying belligerent is bound to respect the laws in force except where "imperative military necessity" requires alteration;<sup>4</sup> that occupation of the enemy's territory does not mean annexation of it;<sup>5</sup> that the law of nations no longer recognizes the right of pillage and devastation;<sup>6</sup> that private property in land warfare may be taken only for the needs of the army;<sup>7</sup> that libraries, churches, school buildings, museums, almshouses, and hospitals must be protected and that art treasures can no longer be carried off by an invader for the enrichment of his own galleries;<sup>8</sup> that the civil population of the enemy territory are not to be regarded, generally speaking, as enemies; that

<sup>1</sup>Compare the American *Rules*, Art. 225; the British manual, Art. 133; and the French manual, Art. 65.

<sup>2</sup>Morgan, pp. 105, 169. The following from an article by Major General Disfurth published in the *Hamburger Nachrichten*, November, 1914, has been quoted as an example of the estimation in which historic monuments are held by German military commanders: "War is war and must be waged with severity. The commonest ugliest stone placed over the grave of a German grenadier is a more glorious monument than all the cathedrals in Europe put together. They call us barbarians. What of it? For my part I hope that in this war we have merited the title of barbarians. Our troops must achieve victory. What else matters?" Quoted by Sir Gilbert Parker in his book, "The World in the Crucible," p. 80.

<sup>3</sup>Morgan, p. 197.

<sup>4</sup>*Ibid.*, p. 181.

<sup>5</sup>*Ibid.*, p. 180.

<sup>6</sup>*Ibid.*, pp. 161 and 177.

<sup>7</sup>*Ibid.*, p. 170.

<sup>8</sup>*Ibid.*, p. 169.

they cannot therefore be injured, insulted, maltreated, carried away into bondage, or killed;<sup>1</sup> that the sick and wounded of the enemy should be protected and cared for; etc.<sup>2</sup> In fact, however, every one of these rules has been violated—some of them many times—by the German armies during the present war.

The German manual, therefore, must be studied not merely as a document but in the light of German practice in order to arrive at a just conception of the real German philosophy of the nature and objects of war and the means and instruments that may be employed in prosecuting it to a successful termination. One can no more obtain a true notion of this philosophy by confining his study to the text of the manual than he can understand the real character of the German government by reading the formal prescriptions of the constitution.

## THE GERMAN CODE OF NAVAL WARFARE

Happily what is said above in criticism of the German manual of land warfare cannot be applied to the German manual for the conduct of war at sea.<sup>3</sup> The rules of the German prize code in respect to blockade, contraband, capture, search, and the destruction of prizes are quite in harmony with the generally recognized laws and usages of naval warfare. In the main they are literal reproductions of the corresponding rules of the Declaration of London, although there are some unimportant divergencies.

Before capturing a vessel, the prize code tells us, the commander must cause it to stop by means of a signal, he must then send aboard a searching party, its papers must be examined for the purpose of determining its nationality as well as the character and destination of its cargo, etc. If the examination establishes the liability of the ship or cargo to capture, a prize crew must be placed on board and the vessel taken in for trial by a prize court. Members of the crew who are subjects of a neutral state must be released without conditions.<sup>4</sup> Following the rules of the Declaration of London, the prize code allows the captor under certain conditions to destroy his prize instead of taking it in for adjudication<sup>5</sup> but it takes care to add that "before proceeding to a destruction of the vessel, the *safety of all persons on board*, and, so far as possible, of their effects, is to be provided for, and all the ship's papers and other evidentiary material of value for the formulation of the judgment of the prize court are to be taken over by the commander."<sup>6</sup> Regarding the destruction of neutral vessels for carrying contraband, the prize code expressly declares, following the Declaration of London, that such vessels may be destroyed

<sup>1</sup>*Ibid.*, pp. 147-148.

<sup>2</sup>*Ibid.*, p. 115.

<sup>3</sup>The *Prisen Ordnung* of Sept. 30, 1909, and the *Prisen Gerichtsordnung* of April 15, 1911, together promulgated as a prize code on Aug. 3, 1914. Both have been translated into English by C. H. Huberich and Richard King and published under the title "The Prize Code of the German Empire as in Force July 1, 1915" (New York and London, 1915).

<sup>4</sup>Arts. 81-98.

<sup>5</sup>Art. 113.

<sup>6</sup>Art. 116. This humane requirement regarding provision for the safety of the crews and passengers is repeated in Art. 129.



only when subject to condemnation by a prize court; and it adds that they are not subject to condemnation unless the contraband on board constitutes more than half the cargo.<sup>1</sup>

As to blockades, the prize code lays down the universally accepted principle that a blockade to be legal must be effective,<sup>2</sup> that is, it must be maintained, in the language of the prize code, by a "cordon" of ships off the blockaded ports,<sup>3</sup> and that, when vessels are destroyed by the captor for breach of blockade, provision must be made for the safety of the persons on board.<sup>4</sup> Finally, the prize code in accordance with Conventions No. X and XI of the second Hague Conference declares that hospital ships and vessels engaged on missions of philanthropy and relief are exempt from capture, and of course from destruction.<sup>5</sup>

## GERMAN METHODS OF WAR AT SEA

These rules are beyond criticism; unlike so many of those in the German manual of land warfare they conform to the requirements of the great international Conventions as well as the best usage of modern naval warfare. Unfortunately, however, German practice during the present war has been in flagrant contradiction to them. The requirement that vessels shall be searched, their nationality verified, and their liability to capture established before destruction, has rarely been observed by German submarine commanders. Their examination has usually consisted of nothing more than a long distance view through a periscope, under circumstances which make it impossible for the commander to determine the destination of the ship or the character and destination of the cargo. Hundreds of neutral vessels, more than a thousand altogether, have been torpedoed, in most cases, for carrying contraband, yet there appear to be few or no instances in which the destroying commander stopped the vessel, inspected its papers, or examined its cargo—this in the face of the rule of the German prize code that a vessel may not be destroyed for carrying contraband unless it is liable to condemnation by a prize court and unless the contraband goods constitute more than half the cargo. How it is possible for a submarine commander peering through the narrow slit of a periscope to determine the character of a cargo in the hold of a distant ocean liner, much less to determine what proportion the contraband goods, if there be any, bear to the total cargo, has never been explained.

The provision of the German prize code that the captor shall make provision for the safety of all persons on board before destroying the vessel has, as is well known, been ruthlessly disregarded. Ocean liners by the hundred have been torpedoed by German submarines sometimes without a word of warning, sometimes with warn-

<sup>1</sup>Arts. 41 and 113a.

<sup>2</sup>Art. 59.

<sup>3</sup>Arts. 76, 77.

<sup>4</sup>Arts. 78, 113.

<sup>5</sup>Art. 5.

ing entirely insufficient to enable the crews and passengers to take to the life boats. Even when provision was made for the safety of those on board, it consisted of nothing more than placing them in small life boats, frequently in rough weather, sometimes hundreds of miles from land, leaving them to drift about for many days exposed to the rigors of winter, to suffer the tortures of thirst and hunger, and often to be washed overboard and drowned in the seas which they were innocently traversing and for the freedom of which the German government pretends to be fighting. According to official British returns published in March, 1918, 12,836 noncombatants of British nationality alone, including many women and children, had lost their lives in consequence of this method of warfare.<sup>1</sup> Down to May, 1918, the toll taken in this way of Norwegian ships and seamen amounted to 755 vessels and 1006 lives, not counting 700 men on 53 missing vessels most of which are now regarded as lost.<sup>2</sup>

Notwithstanding the rule of the German prize code that for a blockade to be legal a "cordon" of vessels must be stationed off the blockaded coasts and ports so as to make the blockade effective, the German government pretends to have established a lawful blockade of England by means of the submarines, which, of course, by reason of their number and character, are incapable of maintaining a blockade. Such a blockade is very much like the expedient of a police commissioner who without having a sufficient number of officers at his disposal to close a street depends upon the occasional dash of a policeman upon the scene who shoots innocent bystanders and trespassers alike. There is no formality of search, no notification, no adjudication. The whole procedure is like ambushing a man and sending him to his death without warning and without a trial.

## DESTRUCTION OF HOSPITAL AND BELGIAN RELIEF SHIPS

In a similar manner the immunity of hospital ships and vessels engaged in charitable work, proclaimed by the German prize code in its very first chapter, has been deliberately overridden again and again by German submarine commanders. On October 26, 1914, the French steamer *Amiral Ganteaume* with 2500 Belgian refugees who were being transported to England from their stricken country was deliberately torpedoed by a German submarine without warning and without excuse. The French government justly characterized the act as the "murder of inoffensive individuals" and asserted that "never before in the most barbarous times had a crime comparable to this been committed."<sup>3</sup> Among hospital ships similarly torpedoed were

<sup>1</sup>*New York Times*, March 14, 1918. See also an address by Wesley Frost, United States Consul at Queenstown, published in the *London Weekly Times* of Dec. 7, 1917; also his despatch to the Department of State, text in *New York Times* of April 23, 1917. Mr Frost, who saw hundreds of the rescued victims, gives many harrowing details of the sufferings which they endured. See also a book by Alfred Noyes entitled "Open Boats" (New York, 1917) and a very frank and illuminating account by a German submarine commander in his book entitled "The Journal of a Submarine Commander" (English translation by Russell Codman, Boston, 1917).

<sup>2</sup>Despatch from the Norwegian Foreign Office published in the *New York Times*, May 7, 1918.

<sup>3</sup>*Revue Générale de Droit International Public*, July-Oct., 1915, Docs. p. 112.

the *Asturias* (31 persons lost their lives), the *Anglia* (with a loss of 100 lives), the *Britannic* (about 50 lives being lost), the *Bremer Castle*, the *Gloucester Castle*, the *Donegal*, the *Lanfranc* (75 lives lost), the *Stephano*, and others. Every one of these vessels bore in conspicuous letters the Red Cross markings which at night were highly illuminated. In some cases the excuse given by the German government was mistake; but in January, 1917, the German government threw off the mask and announced that in the future all British and French hospital ships would be regarded as vessels of war and would if encountered in the war zone be sunk without warning<sup>1</sup>—this on the pretext that the Entente hospital ships were engaged in transporting troops and munitions of war. The British and French governments emphatically denied the charge and caused the attention of the German government to be called to the provision of the Hague Convention which allows belligerents to stop and search hospital ships and to verify any suspicions which they may have that the Red Cross privilege is being abused. But German submarine commanders apparently did not care to take the trouble to observe this humane requirement of the Convention and they continued to sink every hospital ship which they pretended to suspect of misusing the Red Cross flag, without making any effort to verify their suspicions by an examination. There is no evidence that one of the ships thus torpedoed was ever employed for any other purpose than the transportation of the sick and wounded and the neutral world has accepted the denial of the British and French governments as a truthful statement of facts. The decree of January, 1917, was justly regarded in America as the climax of German savagery in its methods of submarine warfare.

Many relief ships engaged in the transportation of food and other supplies to the stricken people of Belgium, and equally protected by both the Hague Conventions and the German prize code, were similarly treated. The *Harplyce*, the *Ulriken*, the *Otamas*, the *Tokomaru*, the *Hendron Hall*, the *Friedland*, the *Storstad*, the *Lars Fostenes*, the *Haelen*, the *Tunisie*, the *Hinghorn*, the *Camilla*, the *Trevier*, the *Anna Fostenes*, the *Euphrates*, the *Ministre de Smet*, the *Festein*, and various others whose names were not given in the press despatches were some of the victims. Every one of them bore in huge letters the markings of the Belgian Relief Commission, and what is more, every one carried a safe conduct issued by authority of the German government. In a few cases the excuse alleged was mistake, which could have been avoided had German submarine commanders taken the trouble to observe the formality of search and verification which the German prize code itself requires. In most cases, however, the pretext put forward was the same as that alleged in justification of the sinking of hospital ships: namely, that they were engaged in carrying troops and munitions, and in some instances they

<sup>1</sup>Memorandum of Jan. 29, 1917, to the American government for transmission to the governments of Great Britain and France.

were even charged with attacking German submarines. How submarine commanders, in view of their practice of destroying without searching and verifying the character of the cargoes carried by their victims, could have known that the vessels in question had on board troops and munitions is not apparent. Most of the relief ships thus destroyed were in fact of neutral nationality and could have had no motive in transporting troops or munitions for either belligerent. No evidence was ever offered in support of the charges made by the Germans, and the vigorous denial of the officials of the Relief Commission may be taken as an absolutely truthful statement of the facts.

Such is the manner in which German naval commanders have respected the rules of their own prize code promulgated by the German government on August 3, 1914. It is hard to see how it can be reconciled with the noble utterance of Germany's great diplomat, Marschall von Bieberstein, at the second Hague Conference: "The officers of the German Navy, I loudly proclaim it (*je le dis à voix haute*), will always fulfill in the strictest fashion the duties which emanate from the unwritten law of humanity and civilization. As to the sentiments of humanity and civilization, I cannot admit that there is any government or country which is superior in those sentiments to that which I have the honor to represent."<sup>1</sup>

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<sup>1</sup>*La Deuxième Conférence de la Paix, Actes et Documents, T. III, p. 382.*





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# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV

AUGUST 19, 1918

No. 51

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912.]

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## The Responsibility for the Great War

BY

LAURENCE M. LARSON

Professor of History

An address delivered at a convocation of this College of Agriculture,  
University of Illinois, May 16, 1918.



PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
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## THE RESPONSIBILITY FOR THE GREAT WAR.

In the summer of 1914, when the Great War suddenly broke upon Europe, there was much perplexity and confusion of thought among neutral observers. Signs of a coming test of strength had been plentiful, but thus far they had proved false: diplomatic "crises" had been successfully handled; sabers had rattled but had remained in the sheath; "storm clouds" had failed to break. And now, almost without warning, the most malignant forces of civilization were loosened and the world war was a fact.

There was nothing in the European situation of that year that should "inevitably" have led to war. Armed conflicts usually come when statesmen, diplomats, and the controlling classes lack wisdom in dealing with real crises or when the ruling elements actually desire war. Justice sometimes demands warfare, but in 1914 justice was evidently not active in the councils of Central Europe. Neutral observers were soon in fair agreement that in August of that year a crime had been committed—the greatest crime in all the ages.

In their search for the criminal they received but slight help from the belligerent parties; all tried to load the responsibility for the war on the backs of their opponents. Soon after the outbreak, Count Andrassy, an eminent Hungarian statesman, in a book entitled "Whose Sin is the World War," placed the blame on Russia; England and France were responsible in a lesser degree. The Germans, however, were unwilling to accept Andrassy's dictum; they regarded England as the chief criminal and called fervently on the Almighty to join in punishing that wicked state. England in her turn found the responsibility in Berlin and poured forth her wrath upon the Kaiser as the symbol of Prussian power and perfidy.

Before many months the neutral world had come to feel that the burden of responsibility must ultimately be placed on one of these two powers, England or Germany. And, as the war developed, a constantly growing number came to feel that the guilt must be charged to the German government. It may, therefore, be worth while to review a few

outstanding facts of recent history, the fuller understanding of which has helped to drive mankind toward this conclusion.

One of the chief controlling factors in British foreign policy in the second half of the nineteenth century was a deep-seated fear of Russia. Spanning the vast plain from the Baltic Sea to Bering Strait, a distance of nearly 5,000 miles, and controlling the destinies of more than 150,000,000 people, the Russian Empire made a tremendous impression on statesmen two generations ago. But as the century marked its close it gradually dawned upon Western Europe that Russia was not able to play the part that she had chosen. The outcome of the Russo-Japanese war convinced the world that there was much clay in the feet of the Russian giant. In England the dread of "the Bear" passed away, but it was replaced by another fear—the fear of Germany.

The belief that Germany might some day become a menace to British power began to find expression about thirty years ago, and had its origin in competition and rivalry, of which three forms developed: commercial, naval and imperialistic.

### I. *Commercial Rivalry.*

The commercial rivalry originated during the eighties, when Germany was beginning her wonderful development along industrial lines. Before this time England had largely provided the world with manufactured products; now Germany appeared with a demand for a large share of the world's commerce; her merchants even began to sell their wares in the markets of the British Isles. Their success irritated the English, and parliament (1887) passed an act requiring all goods of German origin to be clearly marked "made in Germany." This law did not work out as was intended, however, for the Germans seized on the phrase and began to use it for trade-mark purposes.

For a time it was feared in England that the German merchants might succeed in their efforts to obtain the leadership in the world's trade; but English commerce soon began to show a parallel growth, especially during the five years just preceding the war. England was apparently on the way to regain her commercial supremacy—to the great disgust of the industrial barons of Germany. There was in 1914 no reason why England should wish to risk a war for the destruction of German commerce.

## II. *Naval Rivalry.*

The naval rivalry followed the economic expansion of Germany and was in a measure an outgrowth of the same. Germany was building a large merchant marine, and there is a superstition abroad that such a fleet must have the support and protection of a great and efficient navy. Twenty-five years ago certain influences in Germany began to agitate for a strong naval armament. In 1897 Admiral Tirpitz became the chief of naval affairs. It was his purpose to develop a German navy so strong that no other power would care to attack it. In this he was supported by a powerful organization, the "Navy League," which the Krupps helped to finance, and which in a few years could count its membership by the hundred thousands.

It has long been the policy of England to maintain only a small standing army, but to keep afloat a navy as large and as efficient as any other two navies: this is known as the two-power standard. The character of the British empire necessitates such a policy: nine-tenths of the subjects of Britain live outside Europe, most of them thousands of miles away. To maintain communication with her dependencies over the sea and to provide for their prompt and adequate defense, England needs a large navy.

But now comes Germany with a proposal to maintain the greatest and most efficient army in the world and to add to it a navy that would rival that of England and perhaps ultimately surpass it. If the British government were to maintain the two-power standard, more English ships must be built; and now began a dangerous competition in ship construction which continued to the beginning of the war. This meant vast expenditures of money and consequently high taxation. This led again to much complaint, especially in England where the government was anxiously seeking methods by which to finance certain important social reforms, such as national insurance of workingmen and pensions for the aged poor.

Much has been said in recent years about the menace of Prussian militarism, to which the Germans have replied by calling attention to English navalism. A navy, however, is essentially a defensive weapon; its use in offensive warfare is narrowly limited and ordinarily requires the coöperation of an army. A great military force, on the other hand, can often be used effectively without the support of a fleet, as German warfare in the present conflict has abundantly proved. Militarism is a

greater menace than navalism; but a combination of militarism and navalism, as planned by the war lords of Berlin, is the greatest menace to the world's peace imaginable.

About 1901 the English people began to appreciate the dangers of the new situation. The Boer War, which had just been ended, had revealed the difficulties of imperial defense; it had also revealed the fact that England had no real friend among the great powers. The "splendid isolation" of which a prime minister had boasted a dozen years earlier did not look attractive then, more particularly because across the North Sea an unfriendly rival was developing a wonderful naval establishment, and England suddenly remembered that she had no fleet with which to match and to meet the battleships of Germany riding at anchor only 200 miles away.

In the decade before the war two great problems lay before the English government on the side of the admiralty; to maintain the two-power standard and to establish a North Sea fleet.

The government began by forming an alliance with Japan, according to the terms of which the latter power should take over the protection of British interests in the North Pacific. This would release a number of British men-of-war, which could be brought home and assigned to duty in the North Sea.

Another important step was the appointment of Sir John Fisher to a high office in the British admiralty. Sir John was more than a mere administrator; he was a real seaman and appreciated the possibilities of naval development. He rebuilt and reorganized the British navy, beginning the work by assigning 180 ships to the official junk heap. But John Fisher's activities were not all destructive; he directed the building of a new battleship which was larger, swifter, and carried heavier guns than any other battleship afloat. This was the famous *Dreadnought*, which was completed for service in 1906.

The launching of the *Dreadnought* produced a sensation in the naval world. All the older battleships were suddenly relegated to second place. The other great powers immediately felt that they, too, must have dreadnoughts. Incidentally the launching of John Fisher's new man-of-war postponed the great European conflict for eight years. The Germans had cut a canal across Schleswig between the North and Baltic seas so as to facilitate naval movements and to provide a refuge for their warships and merchantmen at times of great danger. Now it

was discovered that the Kiel Canal was too narrow to accommodate battleships of the dreadnought type. The German government at once proceeded to enlarge this waterway and on July 1, 1914, the work was completed. A month later the Kaiser called out his forces, and the peace of Europe was at an end.

### III. *Imperialistic Rivalry.*

In its early stages the Great War was a struggle for empire; the Germans hoped to win colonies and dependencies; Great Britain wished to retain what she already possessed. England did not covet any German territory; on the other hand Prussian agitators and publicists were constantly calling on the English "land-grabber" to disgorge, not for the benefit of subject Asiatics or Africans, but in the interest of Prussian capitalists. Though many Englishmen felt that the expansion of England had already passed desirable limits, they were averse to hauling down the British flag on the demands of a rival and apparently unfriendly power. So the Briton set his teeth and informed the Prussians that "what we hold we shall keep."

For more than three hundred years the English have been engaged in colonizing ventures. Not even a German historian in his serious moments would care to deny that the building of the British Empire has brought great benefits not only to England, but to the cause of civilization throughout the world. The German government began to take a half-hearted interest in colonial expansion only thirty-five years ago. While the English Puritans were settling New England and laying the foundations of the present United States, Germany was fighting the Thirty-Years' War. While the English East India Company was establishing British power in India, Frederick II and the Prussians were engaged in the presumably laudable effort to deprive the Hapsburg dynasty of one of its choicest provinces. While Englishmen were settling Canada and Australia and making those great regions securely British, the two great German states, Prussia and Austria, were occupied with the far more spectacular and congenial task of slaughtering Poland and dividing the carcass with the Russian Czar. While David Livingstone and Cecil Rhodes were exploring and winning South Africa for England, Germany was busy strengthening herself in Europe and incidentally trying to impose *Kultur* on sundry Danes and Frenchmen who had become unwilling subjects of the Kaiser a few years before.

When the Fatherland at last was ready to consider territorial expansion outside Europe, the desirable regions had long been appropriated. The territories that fell to Germany in the "scramble for Africa" in the eighties were not such as would gladden the Prussian imperialist, and he looked with longing eyes toward Egypt, India, and South Africa,—but there was the Union Jack!

In 1901, however, Paul Rohrbach, a German publicist, sketched and put forth a plan that looked highly promising; it was to utilize in modern fashion the ancient Persian road and trade route from the Bosphorus to the Persian Gulf. The project was to build a railway from Constantinople through Asia Minor and Mesopotamia to the mouth of the "rivers of Babylon." Ostensibly this railway was to be the means for the development of the Near East; and to this the English had no serious objections. But as they reflected on the possibilities of the Baghdad railway scheme British statesmen began to feel somewhat uneasy.

(1). East of the Persian Gulf in the Middle and Far East lives one-half of the population of the entire world. The European trade of this vast region, which in recent years has been carried in large measures in English ships through the Suez Canal, would, in part at least, be diverted to this far shorter railway route.

(2). An important branch of the Baghdad system was to run south through Syria to the neighborhood of the Isthmus of Suez. In a war with Germany this might prove extremely important as it would endanger the English possession of the Suez Canal. If the Germans and Turks should seize the isthmus, the Germans would possess both of the two short routes to the Orient, the Baghdad Railway and the Suez Canal.

(3). The Syrian branch of the Baghdad Railway could easily be connected with the terminus of the Cape to Cairo Railway, which the English were building in eastern Africa. It might be an advantage to be able to travel by rail from Cape Town to Hamburg, but the English feared that the advantage would be chiefly with the Germans.

(4). It also seemed possible that somewhere on the Persian Gulf at the terminal of the Baghdad Railway the Germans might develop a naval station sufficiently strong to endanger English supremacy in India, which is only four days' sailing distant. India has long been and still remains the central fact in the British Empire. It is the richest and most populous dependency in all the world and the English are naturally not disposed to surrender India to the Germans.



The German expansionists, who talk glibly of *Kultur* in Egypt, Mesopotamia, India, and China, doubtless based their hopes largely on the Baghdad project. And then suddenly the dream vanished. It was learned that the chief of an Arab tribe on the shores of the Persian Gulf, the sheikh of Koweit, had, even before the Germans had arranged to build their railway, placed his territories under the protection of England. And the port of Koweit was the only available terminal for the great road!

The English did not come into these regions as interlopers. For three hundred years the Union Jack has waved over the Persian Gulf. For three hundred years the English navy has policed its waters and given trade what security it has been able to enjoy. The Union Jack was there even before the Turkish Crescent appeared in the Persian Gulf; but the English annexed no territory; they were in those waters in the interest of trade only.

British imperialism is not wholly altruistic; and yet, when it is compared with the imperialistic policies of other nations, it reveals a remarkably unselfish spirit. England does not tax her colonies; the taxes raised in Canada, Australia, or India are spent in and for the colony that pays the tax. What England wants in the Orient is an opportunity to trade on the same terms that are granted to other nations. She seeks no monopoly for herself nor does she discriminate in her own favor by means of protective tariffs. It may be said in passing that the Germans are not able to understand the spirit of British imperialism; to them it is incontestable evidence that the "shop-keeper" nation is an inefficient and inferior race.

#### IV. *The Entente.*

During the decade when the German expansionists were preparing to challenge British power in the Orient, the English diplomats were seeking to establish friendly relations with other powers. The alliance with Japan (1902) has already been noted. More important were the understandings with France (1904) and with Russia (1907) which became the basis of the *Triple Entente*.

There was no real hostility between France and England in 1904, but the feeling was not wholly cordial and in certain parts of the world the English and the French were keen rivals. They had come near to collision in central Africa where French Soudan jostles English Soudan.

But M. Delcassé, the French foreign minister, felt that with the German enemy gaining yearly in strength France could not afford to be on unfriendly terms with England. Negotiations were opened with the English foreign office, which resulted in a settlement known as the *entente cordiale*. France gave England a quitclaim deed to Egypt while England on her part promised not to interfere with the plans of France with regard to Morocco. Other questions were also taken up and settled to the satisfaction of both parties.

In 1907 England, to the great astonishment of Europe, came to a similar "cordial understanding" with Russia. As noted above, English statesmen had long feared the steady expansion of Russian territory. In spite of her length of coast line, however, Russia was not favorably situated with respect to over-seas trade. It was believed, therefore, that the Muscovites had an ambition to force their way to the ocean on three sides: northwestward into northern Norway to an ice-free port on the Atlantic; southward through the Turkish Straits to the Mediterranean; southeastward through upper India to the Indian Ocean.

With the passing of this fear it became possible to arrange certain limits in Asia within which the contracting parties agreed to confine their operations. Among the arrangements was the much condemned partition of Persia into "spheres of influence." On the British side this transaction was entered into with honorable intentions toward Persia and perhaps in part from a fear that the German menace, which was creeping forward along the Baghdad route, might continue its march eastward along the Persian Gulf.

The Germans professed to see in these negotiations not an effort to maintain the balance of power and to secure the interests of England, but a diplomatic offensive, a policy of "encirclement," directed against Germany to defeat her ambitions and to strangle her economic development. Two men were credited with the chief responsibility for this policy: Edward VII, the crafty intriguer who traveled from court to court for the purpose of stirring up enemies against the lovers of peace in Potsdam; and Sir Edward Grey, the English secretary of state for foreign affairs, who sat in his secluded office in Westminster devising means to ensnare naive and unsophisticated diplomats.

To one who is not a German the policy of encirclement is by no means evident and for several reasons seems to be a creature of Prussian imagination.

(1). The Prussian theory credits King Edward with greater abilities than the English people were able to discover in His Genial Majesty. It is true that the king had a wide acquaintance in royal circles, but it is not likely that his influence with foreign governments was very great.

(2). The entente had its origin in France rather than in England; the statesman most responsible for the *entente cordiale* was Delcassé.

(3). Sir Edward Grey was not in office in 1904 and had nothing to do with the understanding with France. The negotiations on the English side were carried on by Lord Lansdowne, whose intentions were surely not to provoke war or even resentment. Lord Lansdowne was in the war office during the Boer War and did not come out of that conflict with much credit. It was the same Lord Lansdowne who some months ago wrote a letter in which he seemed to favor "peace by discussion."

(4). When Sir Edward Grey came into office in 1905, he continued the policy of his predecessor and strove to establish friendly relations with as many European powers as possible. He came to an understanding with Russia and succeeded in making certain important agreements with Italy and Spain respecting English interests in the Mediterranean Sea. In 1914 he was even on the point of reaching a cordial understanding with Germany.

(5). From 1905 to 1914 the government of England was administered by a cabinet of a Liberal-Radical type, several members of which had strong leanings toward pacifism. Two of the ablest ministers, Lord Morley and John Burns, resigned in August, 1914, rather than agree to make war on Germany. Another member, Lord Haldane, was even under suspicion as being too friendly to Germany. The cabinet as a whole was pledged to enact a great program of social reforms, and the achievements of the Asquith ministry in this direction are surely notable. It was a government that gave nearly all its energies to domestic affairs and was deaf to appeals for a larger army and militaristic legislation.

(6). English sentiment during this decade was—we may safely affirm it—overwhelmingly for peace. There has never been much jingoism in the Liberal ranks and the Unionists had come out of the Boer War in a very chastened mood.

During the same period Germany displayed a spirit that was anything but pacific. In 1907 the English government suggested that the

subject of a general reduction of armaments be discussed at the second Hague Conference; the Kaiser promptly replied that in that case he would have nothing to do with the conference. The following year King Edward visited his imperial nephew and proposed that England and Germany should cease their competition in the building of war ships, but to no purpose. The Kaiser "avowed his intention to go to war rather than submit to such a thing."<sup>1</sup> The King returned to the subject in 1909, but without success. Lord Haldane was sent to Berlin on a similar mission in 1912; and in 1913 Winston Churchill suggested that the two countries should declare "a naval holiday"; but results were not forthcoming, and the two governments continued to build more and larger ships. In 1911 the Kaiser created a crisis in Morocco, which happily found a peaceful outcome. In 1913 the Reichstag voted large additions to the German army. Various suggestions looking toward the arbitration of disputes were made, by our own government among others, but Berlin would not listen. And during the whole period a series of chauvinistic and abusive books and pamphlets came from the German presses in which England was characterized as the rival and enemy which must be dealt with at the earliest opportunity, whether the Kiel Canal were finished or not.<sup>2</sup>

#### V. *The Eve of the War.*

Time came, however, when those responsible for governmental action in Berlin felt less inclined to provoke England. Naval competition with the island kingdom looked hopeless, and von Tirpitz finally concluded that Germany need not be disturbed if England should build sixteen warships to her own ten. A timid, cautious man of rather limited abilities, von Bethmann-Hollweg, had come into the chancellorship, and he even began to hope for better relations with the English. Accordingly, in 1912, he sent to England as German ambassador, Karl Max, Prince Lichnowsky, a Silesian nobleman who was not without successful diplomatic experience and was known to favor an understanding with England and Russia. In Westminster the new ambassador found Sir Edward Grey anxious to accomplish the same purpose, and the two men proceeded to discuss the terms of a new "cordial understanding."

<sup>1</sup>Quoted by Bernadotte E. Schmitt, *England and Germany*, p. 184.

<sup>2</sup>Albrecht Wirth in a book on "German foreign policies," (1912), favored a war for Morocco. "They say we must wait for a better moment. Wait for the deepening of the Kiel Canal, for our naval program to have taken full effect," etc. *Conquest and Kultur* (1918), p. 117.

Since von Tirpitz had accepted the naval ratio of ten to sixteen, there remained only two matters that needed serious consideration: the Baghdad Railway and Germany's demand for colonial possessions. On both these points the negotiators seem to have reached satisfactory agreements.

(1). England agreed that the Germans might extend the Baghdad Railway to Basra, a point about 70 miles from the Persian Gulf. From Basra to the Gulf the road was to be built and controlled by the English. This left almost the whole of the great river valley to German capitalists and engineers. In return the Germans agreed to recognize the rights of earlier English investments in this region.

(2). Portugal still had important colonial possessions in East and West Africa which the Germans coveted. The Portuguese had held these for four centuries, but had done very little to develop them and might find it expedient to sell them. Sir Edward Grey could not dispose of these colonies, but he agreed that, in case Portugal should wish to sell them to Germany or ask Germany to assist in developing them, England would offer no objections.

These agreements were made, but the treaties were never signed. Sir Edward Grey insisted that the agreements must be made public; Berlin demanded that they be kept secret. Finally, in July, 1914, the Germans concluded that the treaties might be of value and agreed to Sir Edward's terms; but it was then too late.

Meanwhile a spirit of dissatisfaction and wrath had descended upon the ruling classes in Germany. To the earlier chauvinism, bigotry, and lust for territorial expansion there was now added a painful sense of humiliation and defeat. The Fatherland, though destined, as the Prussians believed, to direct and reshape the world, found its aims and ambitions foiled or balked at every turn. The Morocco venture (1911) had brought nothing but disappointment. In the First Balkan War the Turk, now a friend of Germany, had been disastrously beaten. In the second Balkan War, Bulgaria, for whom the Central Powers had hoped a victory, was defeated (1913). As a result of these wars the Turkish frontier was moved 400 miles away from the Austrian border, and Serbia had planted her flag in the route to the Aegean. Roumania, though ruled by a Hohenzollern, was cultivating the friendship of the Triple Entente, and there was danger that the Baghdad Railway in its European section would have to pass through unfriendly territory in

Serbia or Roumania. The ties that bound Italy to the Central Powers were loosening. The outlook was not pleasant.

True to their history the Prussian war lords determined to strengthen the position of Germany by increasing the strength of the army. By the military law of 1913 the peace strength of the military forces was increased from 723,000 to 870,000. In other respects, too, the army was made stronger and more efficient.

The result of this legislation was a panic in the neighboring capitals. France in the face of strong Socialistic opposition voted to strengthen her army by lengthening the term of service. Belgium followed the example of her greater neighbors and provided for universal service. Russia also lengthened the term of military service. Sweden went through a violent agitation for greater preparedness. England, alone, refused to make any changes in her military establishment.

During the earlier months of 1914 there was much talk about "inevitable" war in Germany. A host of agencies, unofficial but effective, were combining to force the nation over the precipice. The Socialist newspaper *Vorwaerts* wrote with regret about the constant barking of the war dogs: "The naval League of Germany numbers 100,000 members, while the various associations of veterans, which include about 2,000,000 members in all, are genuine hotbeds of jingoism."<sup>1</sup> The paper also calls attention to "the venomous character of the teaching in our public schools" and notes the fact that the "first atlas put into the hands of children nine years old" contains plans of the important battles of the Franco-Prussian war and traces the routes of the German forces in that war.

## VI. *The Outbreak of War.*

The "will to war" was evidently present among the Prussians in the spring of 1914, but there must always be a good cause or at least a colorable pretext, if war is to be justified. Suddenly the pretext came in the murder of the Austrian Archduke on June 28 of that year. Two days later the Kiel Canal was completed; Germany was ready at last. The recent increases in the armies of her neighbors had not yet proved very fruitful; the situation was really fortunate. In France there was violent opposition to the new military law. Russian industry was threatened with paralysis from labor troubles. In Ireland 80,000 Ulstermen were in arms against 80,000 Irish volunteers to prevent the

<sup>1</sup>See *The Literary Digest*, Feb. 28, 1918, p. 423.

extension of "home rule" to northern Ireland. The signs were favorable; Germany ought to strike.

On July 5, a week after the murder of the Archduke, the Kaiser presided at a war council at Potsdam where the great crime was determined upon. Little is known about the personnel and the discussions of the Potsdam Conference, but it is known that Austria was given assurance of support in the matter of Serbia even to the point of war with Russia.<sup>1</sup> The financial magnates of the empire asked for two or three weeks to set their house in order, and the request was granted. Foreign secretary von Jagow went to Vienna to arrange details, and in due time the famous ultimatum was presented to Serbia. On July 28 Austria declared war on the Serbs. Three days later Germany declared war on Russia and prepared to invade France.

The German government has tried to make the world believe that war came when it did because Russia had mobilized, the order having been issued in the afternoon of July 31. Whether this was a general mobilization has been questioned; but the matter is unimportant, as partial mobilization may fall only a very little short of a general mobilization. It is quite likely that, during those last days of July, all the great powers were mobilizing, for it was clear that Europe was steadily being pushed toward war.

Germany was also mobilizing with the rest. The German White Book states that "the Kaiser ordered the mobilization of the entire German army and navy on August 1st at 5 p. m."<sup>2</sup> The word *entire* should be noted, as it may be important. On that same day, August 1, presumably after 5 p. m., Kaiser Wilhelm telegraphed to the king of England that he had ordered mobilization. "I hope that France will not be nervous. The troops on my frontier are at this moment being kept back by telegraph and by telephone from crossing the French frontier."<sup>3</sup>

That an army strong enough and sufficiently equipped for invasion could be gotten together in the few hours that remained of August 1 seems unthinkable. And yet, on that date, there was evidently a strong force on the French border tugging at the reins. The truth seems to be that German fear of Russian mobilization was pretense merely.

<sup>1</sup>For information as to the Potsdam Conference, see the *War Cyclopedia* (Washington, 1917), the *World's Work*, June, 1918 (article by Ambassador Morgenthau), and the recently published *Memorandum of Prince Lichnowski, German Ambassador to England, 1912-1914*.

<sup>2</sup>*Diplomatic Documents of the European War* (London, 1915), p. 413.

<sup>3</sup>*Ibid.*, p. 540.

Earlier than August 1 there must have been a partial though quite extensive German mobilization on the French frontier, the imperial telephone service holding the forces in check until proper orders for mobilization could be issued. Meanwhile, it was feared that a "nervous" France might also mobilize.

During those fateful days of July, 1914, the eyes of England were turned toward Ireland, where civil war was threatening. The government was struggling with a series of difficult domestic problems and was not prepared for war. The British navy was ready for immediate action, but military and financial preparedness had been neglected.

The English telegraph service (like that of Germany, though in a different spirit) was set in motion to restrain the armies on the frontiers of Europe. Sir Edward Grey fought valiantly to preserve the peace of the world and was almost successful. He proposed a scheme of mediation which even Austria, the nation most directly concerned, was willing to accept. "We are quite prepared to entertain the proposal of Sir E. Grey to negotiate between us and Servia"<sup>1</sup> wrote the Austrian foreign minister on July 31.

On that day fate laid the issues of war and peace into the hands of a single man, the Kaiser at Berlin. His position was such that he, and he alone of all the rulers in the world, had the power to choose whether peace should continue in Europe. For two days he entertained the temptation; on the second day he announced his choice; and the forces of destruction—war and famine, disease and death—leaped forth across the world.

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<sup>1</sup> *Diplomatic Documents of the European War*, p. 526.



# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XV.

AUGUST 5, 1918

No. 49

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918]

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## REPORT OF THE WAR COMMITTEE

of the

UNIVERSITY OF ILLINOIS  
For 1917-18



PUBLISHED BY THE UNIVERSITY OF ILLINOIS  
URBANA

## HONORARY CHAIRMEN

The Governor of the State—HON. FRANK O. LOWDEN

The President of the University—DR. E. J. JAMES

The Chairman of the State Council of Defense—HON. SAMUEL INSULL

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## GENERAL COMMITTEE

Chairman, Professor David Kinley, Vice President

Dean Eugene Davenport

Professor S. A. Forbes

Professor F. H. Newell

Professor S. P. Sherman

Professor C. A. Ellis

Professor C. M. Thompson

**SUMMARY OF THE REPORT OF THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS\***  
1917-1918

July 13, 1918

President E. J. JAMES

Dear Mr. President:

I beg to submit herewith the report of the activities of the War Committee for the University year just closed.

DAVID KINLEY, *Chairman*.

The appointment of the War Committee was authorized by action of the Board of Trustees December 11, 1917. In accordance with this authority, the President of the University appointed a committee of seven, as follows: Dean Eugene Davenport, Professors S. A. Forbes, F. H. Newell, S. P. Sherman, C. A. Ellis, C. M. Thompson and the Vice President, Professor David Kinley, *Chairman*.

This Committee requested the Governor of the State, Hon. Frank O. Lowden, the President of the University, Dr. Edmund J. James, and the Chairman of the Illinois State Council of Defense, Hon. Samuel Insull, to permit the use of their names as honorary chairmen. They assented to this request.

The following divisional committees were created:

1, Publication of leaflets and pamphlets; 2, Publicity; 3, Talks and lectures at the University; 4, Lectures through the state; 5, Collection of funds; 6, The University program for war purposes; 7, United States Savings Certificates and Loans; 8, Students' cooperation; 9, The University Service Flag; 10, University war service records; 11, War employment for people connected with the University; 12, Military organization and exhibition; 13, Conservation and economy; 14, Legal advice to drafted men; 15, On the Literature of the War; 16, Women's War Relief and Red Cross; 17, American University Union.

**PUBLICATION OF WAR LEAFLETS**

The following bulletins have thus far been published under direction of the war committee; most of them in editions of 50,000:

The War Committee of the University of Illinois.

Practical Suggestions for Food Conservation, by Prof. Isabel Bevier.

Municipal War Work, by Dr. R. E. Cushman.

Wheat Saving, by Dr. Ruth Wheeler.

The War Garden, by Prof. J. W. Lloyd.

A Program in Food Production, by Dean Eugene Davenport.

War Legislation, by Dr. R. E. Cushman.

War Activities and Moral Leadership, by President Edmund J. James.

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\*The printed report is a summary of the report submitted to the President.

Milk, by Dr. Ruth Wheeler.

The German War Code, by Prof. J. W. Garner.

Sugar in War Time, by Miss V. J. Anderson.

The Great Condition, by Prof. David Kinley.

College Men and the War, by President Edmund J. James.

(The Aims and Claims of Germany, by Prof. David Kinley, was published by the College of Agriculture and reprinted by the State Council of Defense.)

## COMMITTEE ON PUBLICITY

Beginning April 24, news bulletins were sent out every Saturday to a selected list of from four hundred to five hundred newspapers in Illinois and adjoining states, and some special articles to newspapers in the larger cities.

A concise statement of the wartime activities of the University was printed, of a size to be enclosed without folding in letters. Over twenty thousand of these were sent out.

## LECTURES AT THE UNIVERSITY

**War Talks.**—Various sub-committees were appointed for the purpose of ascertaining what war talks were desired by the student organizations and of submitting programs for such talks. The schedule was brought to a conclusion May 9, when a total of 182 had been delivered.

**War Book Discussion Club.**—A War Book Discussion Club, organized partly for the purpose of preparing more thoroughly for giving war lectures and talks, met every third week. The books discussed were provided gratis by the American Association for International Conciliation.

**The Northfield Movement.**—Closely allied with the war talks were the Northfield Discussion Groups, for giving special consideration to political problems from the Christian point of view.

Fifty-three discussion groups were organized. The average attendance was twelve.

**University Lectures by Faculty Members.**—Two series of lectures by faculty members were given, one consisting of four lectures on "War on Waste", the other, of ten lectures, on "Food and the War".

Other lectures were given as follows:

Oct. 10.	Organization of the Army.....	Major E. W. McCaskey
Oct. 17.	Aviation.....	Major T. J. Hanley, Chanute Field
Oct. 24.	Life in the Trenches.....	Lieut. H. R. Hingston
Nov. 7.	Aviation in War.....	Lieut. Paul Montariol
Nov. 14.	Explosives in War.....	E. A. Holbrook
Nov. 21.	Camouflage.....	N. A. Wells
Dec. 5.	The Italian Battle Front (Moving Pictures).....	Major E. W. McCaskey
Dec. 12.	Army Signal Work.....	Lieut. Col. L. D. Wildman
Jan. 9.	The Government's Building Program as Applied to Cantonments, National Guard Camps and Aviation Fields.....	Major W. A. Starrett
Jan. 15.	Our Natural Resources and National Defenses.....	F. H. Newell
Jan. 16.	War Powers and Military Law.....	Major Joseph Wheelless

Feb. 6.	"Many a Mickle Makes a Muckle".....	A. W. Jamison (This lecture was of special interest as preliminary to the thrift campaign.)
Feb. 12.	Geography of the War Zone.....	J. L. Rich
Feb. 19.	War Prices and Profiteering.....	Simon Litman
Feb. 20.	What the War News Means.....	Mr. S. J. Duncan-Clark
Mar. 5.	The American Farmer and the Allied Menu.....	Eugene Davenport
Feb. 25.	The World's Food.....	H. B. Lewis
Mar. 6.	Transportation Problems.....	J. M. Snodgrass
Mar. 13.	Milk Production.....	Eugene Davenport
Mar. 19.	Food Administration and Conservation.....	Isabel Bevier
Apr. 3.	War Economies in Food.....	Viola J. Anderson
Apr. 9.	The World's Bread Supply.....	C. G. Hopkins
Apr. 16.	Wise Selection of Food for the Individual.....	Ruth Wheeler
Apr. 24.	Rations in This and Other Lands.....	Lucile Wheeler
Apr. 30.	The Meat Question.....	H. W. Mumford
Feb. 15.	Historical Features of the War.....	L. M. Larson
Feb. 26.	Aims and Hopes of the German Government.....	Ernest Bernbaum
Mar. 1.	Newspapers in War Service.....	H. F. Harrington
Mar. 2.	Psychical and Social Aspects of the War.....	C. A. Ruckmich, E. C. Hayes
Mar. 4.	The Coal Problem.....	S. W. Parr
Mar. 8.	Arming Our Forces.....	Capt. H. D. Oberdorfer
Mar. 12.	The Alsace-Lorraine Question.....	Kenneth McKenzie
Mar. 20.	The Geography of the Front.....	J. L. Rich
Mar. 26.	The World's Debt to England.....	L. M. Larson
Mar. 27.	War Words from Washington.....	Eugene Davenport

**Lectures by Visitors.**—Lectures by visitors were: "Interpreting the War News", by Mr. S. J. Duncan-Clark, February 20; "Italy's Part in the War", by Professor Charles Upson Clark, February 28; "On Some War Experiences", by Lieutenant Hector MacQuarrie of the British army; and the fourth, "Children of the Frontier", by Mrs. Joseph London Smith, May 18. Mrs. Smith asked that two children be adopted by this community. As a matter of fact nineteen adoptions were made; fourteen by members of the University community, four by groups of members of the University Club, and one from the proceeds of the Faculty Baseball Game. Each adoption represents a subscription of \$72, the nineteen adoptions making a total of \$1,368.

**Vassar Plattsburg Scholarships.**—Another activity of the committee was the war-charity entertainment, "How France Cares for the Wounded Soldiers", of the National Surgical Dressings Committee, given on April 25. The net proceeds were \$252.98, one half of which (\$126.49) was placed at the disposal of the War Committee, and was used to give a scholarship to one Illinois graduate to the Vassar Plattsburg. Two more \$95 scholarships to the Vassar Plattsburg were donated through the Committee, one by the Association of Collegiate Alumnae, the other by the Student Woman's War Relief Committee.

**Masques and Pageants.**—Several masques and pageants were written and produced by William Chauncy Langdon. The first was "The Sword of America", a masque representing the entrance of America into the war, given Thanksgiving night. The "Titans of Freedom", which was presented at the Auditorium on Memorial Day, depicted the meeting of Washington and Lincoln to compare notes about the present war.

Lincoln's birthday was celebrated by a convocation at which the principal address was made by Professor Fernand Baldensperger, captain in the French army.

## COMMITTEE ON EXTENSION LECTURES IN THE STATE

Much of the work of this committee was carried on in connection with the regular University work of the members of the committee. Mr. R. E. Hieronymous, Community Adviser in the State, adapted his work to war conditions. The program for the Third Annual Better Community Conference, held here April 4-7, emphasized war subjects.

**Lectures at Camp Grant.**—The following lectures were given at Camp Grant, each lecturer staying two weeks and giving each of his lectures ten times:

Dr. C. M. Thompson, "The Geographical Background of the War", "American Democracy"; Dr. J. E. Miller, "The British Empire and What It Stands For", "How the War Came About and How it Developed"; Prof. J. W. Garner, "Germany and Her Ambitions", "The French Republic and What It Stands For".

Dr. Carl Rahn gave a series of ten lectures before the Intelligence Section of the 344th Infantry at Camp Grant.

**Entertainment.**—From the beginning of February, the committee worked in cooperation with Mr. K. P. Gordon, General Y. M. C. A. Secretary at Chanute Field, in supplying weekly entertainment for the boys in training there. For seventeen weeks, arrangements were made for at least one musical or dramatic entertainment each week.

**Sub-Committee on Farmers' Institutes.**—The work in Home Economics under the emergency food bill was conducted through the extension departments of the agricultural colleges. Practically all of the extension work of the Household Science Department was adapted to war needs.

Four conferences, of a week's duration each, were held for training extension workers. At the High School Conference the Hoover Lessons and Graphic Exhibits were given to the high school teachers of Home Economics as a basis of lessons on conservation to be presented in their schools and neighborhoods.

During the year fifty-three shows bearing on food conservation were held in different parts of the state. In six centers, leaders for canning kitchens were trained by members of the University staff.

Following is a summary of the activities of this department:

Training classes for volunteers.....	918
Demonstrations for study clubs.....	903
Public lectures.....	1,136
Visits to homes.....	2,020
Bulletins distributed.....	64,421
Press articles written.....	825

**Public Schools and Other Educational Bodies.**—Professor H. A. Hollister, High School Visitor, issued a bulletin on "The War-Time Call of Our Schools", which was sent to about 1,000 newspapers and to about 400 high school principals. He also conducted a campaign of patriotic education in the schools of six counties, sending literature and providing addresses.

## COMMITTEE ON FUNDS COLLECTION

Beginning January 1, this committee gave authority to all individuals or organizations desiring to canvass in the University for funds to be used for purposes connected with the war.

**Woman's War Relief Committee.**—Of student organizations applying for such authority, the most active and successful was the Woman's War Relief Committee. Some items of its work follow:

Donations made during the year:

To Y. M. C. A. War Fund.....	\$600.00
Armenian Relief.....	60.00
Second Red Cross War Fund.....	600.00
Woman's League Auxiliary to Red Cross.....	397.00
Illini Chocolate and Tobacco Fund.....	86.73
Smileage Books.....	10.00
Fatherless Children of France.....	182.50
Red Cross Nurse at Vassar School.....	95.00

\$2,031.23

Principal sources of revenue:

Voluntary tax of women students at 3 cents per week.....	\$432.03
Woman's Mixer.....	88.00
Card Party.....	138.65
Bakery Sale.....	158.95
Peanut Sale at Football Game.....	394.10
Moving Pictures.....	18.77
Christmas Box Fund.....	47.80
Popcorn Balls at Carnival.....	31.23
Food Sales at Dances.....	141.00
Mardi Gras.....	988.55

**Other Organizations.**—April 24, a Food Show was given in the Household Science building by members of Omicron Nu. The sum of \$134.22 netted, was donated to the Woman's League Auxiliary to the Red Cross.

The sum of \$118.43 which was cleared by the committee in control of the Military Ball, on February 22, was applied to the Second Red Cross War Fund.

**The Illinois Chocolate and Tobacco Fund.**—Illinois Chocolate and Tobacco Fund of the University of Illinois, for soldiers, was originated by the Illini and transferred to the War Committee. By March when the Government forbade further transmission of packages, the results of the work were as follows:

Receipts.....	\$321.94	
Expenditures (Cigarettes, Tobacco, etc.).....	58.37	
On June 6 the balance of \$263.57 was disposed of as follows:		
To Second Red Cross War Fund.....	\$182.35	\$263.57
Woman's War Relief Committee.....	78.27	
Expenses of Red Cross Campaign.....	2.00	
	<u>\$262.62</u>	<u>\$262.62</u>
On hand.....		\$ .95

**The Sale of Smileage Books.**—Since the sale of these books came at examination time, only a limited canvass was made among the faculty; but books were placed on sale in the various University libraries. The sum of \$238.00 was realized.

**The Second Red Cross War Fund Collection.**—The canvass was begun May 21 and practically completed on the 24th. The quota assigned the University was \$4,000; whereas the total amount subscribed by faculty and students, including the School of Military Aeronautics, was \$10,581.23.

### COMMITTEE ON UNIVERSITY PROGRAM

The Committee on University Program arranged the room schedule for all classes, including those of the School of Military Aeronautics, for the second semester, and introduced several new courses, among them Military Science (Military 10), "Food and the War" (Military 30), Red Cross course (Military 20), and the History of the War (Hist. 41).

Several war courses were introduced into the summer session. These were:—in economics, War Finance from the Revolution to the Present, The Study of International Trade, and Industrial Resources of the Nations at War; in history, a seminar course on war problems; in sociology, a course on emergency relief; in psychology, a survey of psychological investigations made with reference to military conditions; in electrical engineering, a course in radio communication.

### COMMITTEE ON THE UNIVERSITY SERVICE FLAG

The University Service Flag, the University's recognition of its men in service, was dedicated February 18, in front of the University Library. The flag is twenty by thirty feet. In the center is the number representing the Illinois men in service. The figures are white on a blue ground; they snap on and can thus be changed from time to time as the number of men represented increases. At the time of the dedication the number on the flag was 2,680. The number now, August 1, is 3,894.

### COMMITTEE ON WAR SERVICE RECORDS

The following statement summarizes the participation of the University students, graduates, and faculty, in the military and naval service to June 5:

Army.....	3,599	90.1%
Navy.....	350	8.8%
Marines.....	43	1.1%
U. of I. Men reported Abroad.....	632	15.8%
U. of I. Men in Allied Armies.....	25	
Volunteers.....	3,568	89.3%
Drafted.....	424	10.7%
Commissioned Officers:		
Generals.....	2	
Lieutenant Colonels.....	4	
Colonels.....	4	
Majors.....	43	
Captains.....	191	
1st Lieutenants.....	440	
2nd Lieutenants.....	534	
Chaplains.....	4	
Naval Officers.....	36	
Total.....	1,258	31.5%
Non-com. Officers and Enlisted Men.....	2,734	68.5%



## CLASSIFICATION

Army	Ambulance Corps.....	117	Machine Gun Corps.....	39
	Aviation Corps.....	522	Medical Corps.....	173
	Cavalry.....	18	Musicians.....	15
	Coast Artillery.....	160	Officers' Schools.....	207
	Engineering Corps.....	296	Ordnance Corps.....	175
	Field Artillery.....	364	Quartermaster Corps.....	173
	Gas Defense Service.....	24	Signal Corps.....	107
	Infantry.....	632	Branch Unknown.....	477
	Total.....			3,599
Navy	Radio Corps.....	48		
	Other Branches.....	270		
	Officers' Schools.....	32		
	Total.....			350
Marines	.....	43		43
	GRAND TOTAL.....			3,992

## COMMITTEE ON UNIVERSITY WAR EMPLOYMENT

The Committee on War Employment was appointed December 18. Assistance was given to 485 individuals in connection with war work, and 259 men and women were recommended for positions. Assistance in securing staff personnel was given the following governmental agencies, industrial concerns and war committees:

U. S. Ambulance Service, U. S. Army Engineers, U. S. Coast Artillery, U. S. Naval Engineering and Public Works Dept., U. S. Naval Flying Corps, U. S. Marine Corps, U. S. Signal Corps, U. S. Public Service Reserve, U. S. Civil Service Commission, Ordnance Department, Mechanical Research and Investigation Divisions of the Bureau of Mines and the Bureau of Standards, Division of the Medical Corps, Engineering Branch of the Aviation Section, Army Y. M. C. A., Division of Immigrant Education, Immigration League, Newport News Shipbuilding and Dry Dock Co., Hooker Electrochemical Company, Art Metal Construction Company, Rippley Boat Company, Midvale Steel and Ordnance Company, Union Carbide Company, U. S. Motor Corporation.

## COMMITTEE ON UNITED STATES SAVINGS CERTIFICATES AND LOANS

War Savings Stamps depots, where stamps could be purchased at any time, were established on the campus and in the University business district at several places. In the ten days' campaign (February 13-22) the following amount was pledged to canvassers:

Faculty.....	\$16,099.75
Students.....	<u>7,226.75</u>
Total.....	\$23,326.50

About 50 per cent of this amount was paid in cash; the remainder was pledged to be paid during 1918. In addition to the amount pledged to canvassers, sales to the amount of about \$1,500 were made at the various depots during the campaign.

After the campaign, interest in the stamps and certificates was kept alive. During the first fifteen days of March the total sales amounted to \$2,200, or an average of \$140 a day.

**Third Liberty Loan Campaign.**—The Campaign was inaugurated by the University convocation commemorating the entrance of this country into the war. The total subscriptions were more than double the quota set for the University. The following items are of interest:

Faculty (Urbana-Champaign).....	\$117,500
Faculty members on leave of absence.....	1,900
Students in Urbana-Champaign.....	24,000
Chicago Departments.....	65,150
Instructional Corps and Officers, S. M. A.....	6,100
Cadets.....	4,700

Enough other subscriptions were made to bring the total for the University above \$220,000.

## COMMITTEE ON CONSERVATION AND ECONOMY

Four sub-committees were appointed, each of which had charge of one phase of conservation, as follows:

**Finances of Organizations.**—The Committee on Finances of Organizations investigated the system of financial organization in fraternities with a view to economy from better business methods. A conference of the financial officers of all fraternal organizations was called and the outlook for improvement in financial organization was discussed.

**Coal.**—Professor Arthur C. Willard, the chairman of this committee, prepared a poster explaining the large waste of coal in overheated houses. Several thousand of these posters were printed and distributed.

A canvass was made of student organizations to obtain statistics of coal consumption. The figures obtained are as follows, results being based on 34 organizations:

Average tons coal per person for season 2.86. Maximum 4.70; minimum 1.34.

Average cost of coal per person for season \$14.70. Maximum \$26.20; minimum \$7.50.

Average cost of electricity per person per month \$0.661. Maximum \$1.18; minimum \$0.39.

**Food.**—Ration cards like the following were distributed by the Food Committee:

#### YOUR RATION

Can you make this your honor ration until the Food Administration asks you to change it?

Meat..... $1\frac{1}{4}$  pounds per week  
Fat.....1 pound per week  
Sugar..... $\frac{3}{4}$  pound per week  
Wheat.....as little as possible

Will you try it and so do as well as England and France?

#### DON'T BE A FOOD SLACKER

##### Check Yourself

For help to do it see other side.

These cards were placed on the tables of fraternities, sororities, unit houses and boarding clubs.

On May 1, student leaders inaugurated a campaign against the use of confections. Several hundred women students agreed to eat no candy containing sugar until the food crisis is past.

**Entertainments.**—The sub-committee on entertainments studied the expenditures for social activities in fraternities, sororities and other house units. A report was made showing the saving of about twenty-five organizations for the school year 1917-1918 over the previous year. The aggregate was about \$10,000.

#### COMMITTEE ON LEGAL ADVICE TO DRAFTED MEN

The heaviest work of the committee came the latter part of December and the beginning of January. The greater part of the work of the first few weeks was giving advice to members of the faculty, since their cases were usually more complicated than those of the students.

#### COMMITTEE ON THE AMERICAN UNIVERSITY UNION

In March the American University Union in Europe asked the University of Illinois to contribute \$1,000 toward the support of the Paris Branch Union, the purpose of which is to "meet the needs of American university and college men and their friends who are in Europe for military or other service in the cause of the Allies". The Trustees requested the President to ask the alumni to contribute this sum. The Chairman of the War Committee undertook the work of interesting the alumni in raising the money. At his suggestion the Washington Alumni took charge. On Alumni Day at Commencement time the visiting alumni subscribed \$1,056.50. In addition, Mr. S. T. Henry reported on June 20, subscriptions by the Washington Alumni amounting to \$300 and a pledge of \$150 from the Alumni of New York, making a total of \$450, which if added to the previous amount makes a grand total of \$1,506.50.

#### THIS RATION ALLOWS YOU PER DAY

Meat—4 ounces (as purchased with a reasonable amount of bone) five times a week.

Fat—2 2-7 ounces or 4 level table-spoons—total for fried foods, pastries salads, butter.

Sugar—1 5-7 ounces or 4 level table-spoons—total for beverages, cereal, deserts, candy, ices, and fruit.

In place of wheat, have you eaten oatmeal, cornmeal, rice, potatoes? These substitutes, also milk, eggs, cheese, nuts, fish, fruit, and vegetables, are not rationed.

## COMMITTEE ON THE LITERATURE OF THE WAR

In June, the library sent 535 books to the Chanute Flying Field Y. M. C. A. At present the committee is preparing 500 volumes for shipment on transports carrying United States troops to France.

Mr. George A. Deveneau, of the Agricultural Library, has as "Library Publicity Director" of the U. S. Food Administration for this state been active in getting public libraries all over the state to supply themselves with, and to advertise and display, books and pamphlets on food questions.

## THE WOMAN'S LEAGUE AUXILIARY TO THE RED CROSS

The Woman's League Auxiliary began its work in October 1917, with no official title, the work being done for the Champaign chapter of the Red Cross. A work room was opened for three hours each day. The first semester two hundred signed up to put in a definite number of hours each week. Most of the work done was on refugee garments. There was one surgical dressings class. The following articles were made: 3,000 gauze and muslin dressings, 500 refugee garments, 4 dozen knitted articles, 100 scrap books for convalescent soldiers.

In the second semester 350 girls enrolled for regular work and an average of 25 unenrolled girls came to work each week. Classes in surgical dressings were held every week day and classes in sewing were held four times a week. The following work was done: 12,000 dressings, 12 dozen dressings for Dr. Beard, 28 complete infant layettes, refugee garments.

## OTHER UNIVERSITY WAR ACTIVITIES

(Not under Direction of War Committee)

**The Y. M. C. A. Campaign.**—November 11-19, 1917, a campaign was conducted for funds for the Y. M. C. A. War Work. The total amount subscribed was \$28,906.88.

**The Second Liberty Loan Campaign.**—This occurred before the organization of the War Committee. The best available information shows that about \$50,000 was subscribed by University people living in Urbana. No separate account was kept of the subscriptions of University people living in Champaign.

*Activities of the Engineering Experiment Station:*—To assist consumers in their efforts to conserve fuel and operators to produce greater quantities the Engineering Experiment Station issued a series of publications:

Bulletin 97—Effects of Storage upon the Properties of Coal.

Bulletin 100—Percentage of Extraction of Bituminous Coal with Special Reference to Illinois Conditions.

Bulletin 102—A Study of the Heat Transmission of Building Materials.

Circular 4—The Economical Purchase and Use of Coal for Heating Homes.

Circular 5—The Utilization of Pyrite Occurring in Illinois Coal.

Circular 6—The Storage of Bituminous Coal.

Circular 7—Fuel Economy in the Operation of Hand Fired Power Plants.

Circular 8—The Economical Use of Coal in Railway Locomotives.

Other publications of the station issued during the year are proving helpful in connection with war production and conservation problems. One such is Bulletin 108—Analysis of Statically Indeterminate Structures by the Slope Deflection Method. The results developed are being used by the Emergency Fleet Corporation in the design of concrete ships.

Tests to determine the behavior of various grades of steel under very rapid loadings were made for the Bureau of Construction and Repair of the U. S. Navy. A new type of testing machine was devised and built for these tests.

The station has been helpful in the solution of materials testing problems which have arisen at Chanute Field and in the design of testing apparatus for use there.

*Research Problems:*—Details cannot be given concerning the research war problems conducted by the University. It is proper, however, to give a summarized statement:

On agriculture and food, nine problems have been under investigation; in chemistry, nine inquiries have been undertaken; in the various departments of engineering, sixteen investigations have been conducted in problems relating to the war, all but three or four at the direct request of some of the government departments; in physics, four important inquiries have been conducted; in psychology, two war problems have been investigated.

In addition to the above, other inquiries have been undertaken independently, having relation to food in the war, the preparation of food, wheat substitutes in cooking, coal conservation, proper management of domestic heating apparatus, and many others.

The department of Zoology has participated in the campaign to extend the use of fish as food, and has also been in consultation with the government departments on many other topics.

Various members of the faculty have been granted leaves of absence for various periods to assist in the work of the Committee on Public Information, the Historical Research Board, and other work related to the war.

**School of Military Aeronautics.**—A United States Army School of Military Aeronautics is conducted at the University.

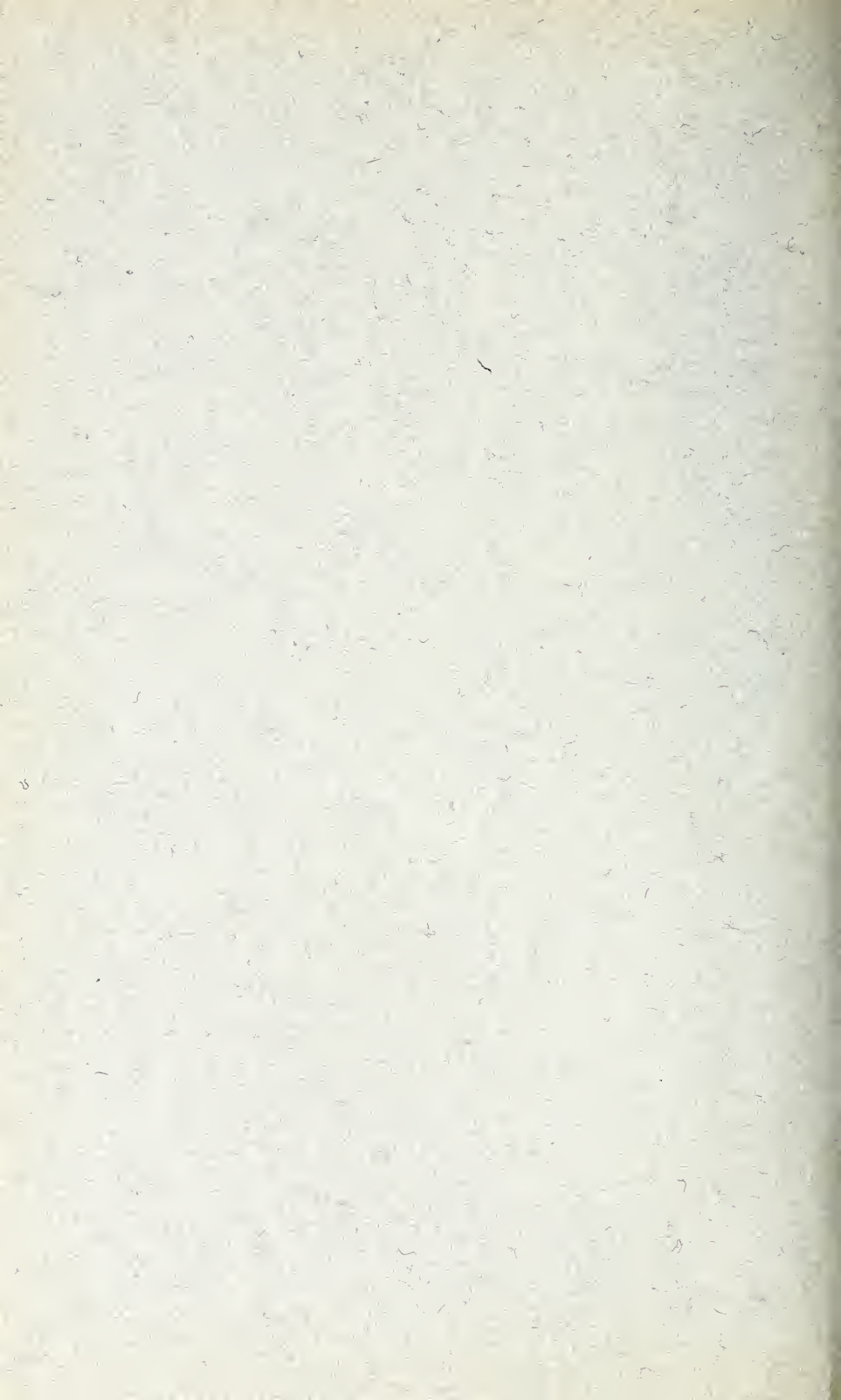
The University authorities initiated the proceedings which led to the establishment of a flying field at Rantoul.

**Illinois Food Production Program.**—The absence of an intelligently planned program of food production influenced the authorities of the College of Agriculture to work out a plan for Illinois. This plan was submitted to the Corn Growers' and Stock Men's Convention, held in February, and also to the State Council of Defense War Conference, and was recommended by both. This plan urged on farmers of Illinois:

- 1, An increased production of wheat; 2, an increase in pork production; 3, a diminution of high finished cattle and an increase of short fed cattle; 4, the saving of lambs; 5, caution in the reduction of dairy herds; 6, as large a corn crop as possible; 7, suggestions for the promotion of poultry products; 8, suggestions for relieving the labor shortage; 9, advice concerning necessary farm machinery, its increase and use.

COMPOSED AND PRINTED BY  
THE UNIVERSITY OF ILLINOIS PRESS







# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

VOL. XV

AUGUST 12, 1918

No. 50

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois under the Act of August 24, 1912]

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## The College Man and the War

[Commencement Address, June 14, 1918]

BY

Edmund Janes James

President of the University



PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA



# The College Man and the War

By EDMUND JANES JAMES  
President of the University

MEMBERS of the Class of 1918:

I take keen pleasure in welcoming you into the great fellowship of college men and women. It is a fraternity which you may well be proud to join. It is broadly extended not only through our land, but through *all* lands. The bond holding us together is a very subtle—not easily explainable—but nevertheless a very real and compelling bond. In all the years to come, no matter where you may be, under whatever circumstances you may live, if you run across a fellow alumnus of your Alma Mater on sea or land, in valley or on mountain, in desert or jungle, though you may never have known or even seen him or been in college with him, though you may be half as old or twice as old, yet when you know that you and he were at the University of Illinois,—I will not say together, for his class may have been 1870 and yours 1918, his subject may have been Greek and yours Mathematics,—yet in spite of it all, you will both experience a strange warming of the heart as you grasp each other's hands, and the fountains of emotion will flow again—no matter how old you are—as you talk and think of old Illinois.

This feeling of college fraternity is not limited to the students of one institution. Next to our own, perhaps, we are stirred to emotion by meeting fellow students from other colleges with whom we have contended in oration or debate or on the football field or the river. But it is not even limited to this. When an Illinois man meets a Michigan man or a Harvard man or a California man, be it in the trenches, on the blood-stained fields of northern France or in the hilly stretches of Macedonia or the desert wastes of Mesopotamia, think you not that his pulse will beat more quickly and his heart be strangely stirred because he has run across a fellow fraternity man? It doesn't even stop here. When you shall meet, in the

years to come, men who have studied at Oxford or Cambridge or Paris or Padua or Rome or Tokio, you will feel this same strange companionship in the freemasonry of college men and women. It is one of the things best worth while as a result of four years of college life and work.

What is the secret of this bond? It is difficult to ascertain and analyze. But I take it we shall find the chief reason in the essential oneness of all college work and effort. We were of much the same age when in college. We were all trying to find ourselves in this universe of mystery. We walked along the same high paths, and peered out into the mysterious depths in front, behind, on either side, to see what it all meant. We were trying to prepare ourselves to run a worthy race, to do our share in the work of the world, to become a real part in that infinite process of life in which we find ourselves. We were raising the same questions, finding the same answers, leaving unsettled the same mysteries. We were reading and studying together the records of the thoughts and feelings of the great ones of earth, of our own country and of other countries, of our own age and other ages. And so we became fellow citizens, intellectual and moral and spiritual, in the same great republic of letters and thought and aspiration—a citizenship which we far more often felt than talked about in our personal intercourse.

This fellowship, my young friends, you will feel more and more to be one of the most valuable results of college life and college graduation. And if some fool asks you sneeringly of what use your college education has been to you—you need not think of anything else; you need not stop to estimate how much higher or lower your salary or greater or less your wealth or reputation because of the opportunities which college and university have brought you. In this beautiful and sat-

isfying companionship of the college men and women of all countries and all times you have a full "value received" for everything which you have put into this enterprise of getting a college education—no matter how much money or how much brains or how much effort you have invested in it.

But there are other and even greater things than this.

I congratulate you that you live in this time and that you are going out into a world vastly full of wonderful opportunities, such as did not greet us of a previous generation.

In the first place you come into this life greatly welcomed, greeted with a glad hand by men and forces which in times past have been accustomed to ignore or slight the personality and qualities of the college man as such.

This is the time of year in which the wise penny-a-liner has been in the habit of indulging in cheap wit and covert and open sneers at the college graduate and his unfitness for the practical duties of real life; in which the cartoonist has loved to represent the combing down of the college graduate by practical men as he crawls disconsolately from office to office seeking a chance to earn his daily bread.

A most remarkable change has come over the spirit of modern industry and everybody from Uncle Sam to the boss rag-picker or junkman is crying out to the college—I will not say graduate—but even undergraduate—"Come over into Macedonia and help us."

I do not think I am exaggerating in the slightest degree when I say that during the last year I could have placed in remunerative positions ten times over every college student in the University of Illinois from freshman to senior, whom I could recommend as being reliable and industrious. And the same thing is true of every college president in the country. I have received letters from many great corporations of many different kinds, from many

great railway administrations, from every branch of the Navy and Army, urging me to recommend to them members of our student body.

There has been an equally imperative demand for the services of our faculty members for positions with which college men have rarely been mentioned in previous years.

Why this sudden and extraordinary demand for college men as such—irrespective oftentimes of special training or technical preparation for specific tasks?

First of all, of course, because of the economic demand for physical labor everywhere—even for the physical labor of the college men—growing out of the extraordinary world conditions now prevailing; but still more from the sudden revelation of the important things lying at the basis of a great and complex civilization which the flames of war have made visible.

War, however justified, however inevitable, is awful; carried on by anybody, anywhere, for any purpose, it is terrible; and no war in history has brought this fact closer to the consciousness of mankind than the present Great War to the successful conclusion of which we have all dedicated our lives, our fortunes and our sacred honor.

But war, aside from the great and immediate issues involved, has also its compensations. And it brings, sometimes, certain good things to pass with such rapidity and completeness as to surpass the achievements of peace.

Scholars and patriots and far seeing prophets have been urging for generations that our governments should spend more money on the support of scientific investigation in all its different lines. This ever-increasing demand has been met by the average man, the average politician, with smiles and smirks and talk about "academic beggars and looters of the public treasury" and by small dribbles of private gifts and public appropriations.

And then the Great War broke out and

our leaders and administrators suddenly became aware of our infinite ignorance in matters of great importance and in their necessary haste have thrown away within a year sums of money as merely incidental to military preparation, which, if spent according to an orderly plan over two generations would have made us scientifically the best prepared of all the nations now fighting.

Scientific men have urged upon the American people the necessity of increasing and improving our chemical and physical laboratories; of building and endowing our biological institutes; of establishing and equipping our departments of public health; of increasing our food supply by increasing and applying our knowledge of scientific agriculture.

Their cries have largely fallen upon deaf ears—their voices have been of those crying in the wilderness—made sick by hope deferred, owing to the shortsightedness and lack of public spirit of our wealthy men or to the ignorance or sloth of our statesmen.

And then the war comes. This is a cry we can all understand. We need materials, which, if we had searched for them, we should have found at home. We need scientific apparatus which we might ourselves have produced instead of drawing it from territory now enemy; we need optical glass for example which in its best form is still only obtainable in enemy laboratories; we need guns and we are still disputing over the kind and quality; we need flying machines and we are nowhere equipped with knowledge or skill to furnish them in sufficient numbers.

Nothing but a great, universal and pressing war could have brought home to the American people what a service science, properly developed, could render the nation in times of peace.

We must first see its awful power in the creation of means of destruction before we are ready to contemplate the possibility of its great service in the interest of humanity and civilization.

The nation has called for chemists by the thousand and the ten thousand. Where were they to come from? Only the universities could furnish them. It needed physicists. Where were they to be found? Only in the Universities. It called for psychologists. Whence were they to come? Only from university laboratories,—the establishment of which Government officials had only a short time before declared was no proper charge on federal funds, granted for the purposes of higher education!

And so university men are thus in a certain sense coming into their own, because the glare of bursting shells reveals everywhere the scientific foundation of the successful waging of a great war.

I can not but believe that this lesson, taught so plainly that a wayfaring man though a fool can not mistake it, will sink deep into the hearts and minds of the American people and that when this war is over and our victorious boys come marching home again with the Kaiser's scalp dangling at the army's belt, our wealthy citizens and our legislators and statesmen will vie with each other in establishing and endowing by public and private money the greatest scientific foundations the world has ever seen; and you and the like of you will be the men and the women to make these foundations effective—for after all no amount of brick and mortar, no number of books, no amount of apparatus can accomplish anything unless we can produce in this institution and the like of it the brains and character and training necessary to push forward the bounds of our knowledge and control over nature.

We all understand with ease why the Government has called upon the Universities and technical schools for men with special training like chemists, engineers, architects, etc. for special work. But why has it called for college men, simply as college men, without reference to special training for specific work — accepting youngsters who have studied Latin, Greek, Entomology, or Archaeology and set them to work upon tasks which have no re-

lation to the lines of study followed in college. This, it seems to me, is the most significant for our future civilization of all the acts of the Government.

Here we have a recognition on the part of the Federal Government that men who have done three or four years successful work in college have acquired an alertness, adaptability, an outlook, a fitness for unfamiliar tasks, a courage in the face of unexpected difficulties which distinguish them in a marked degree as a class from the men who have not had this training and makes it distinctly worth while, therefore, to gamble upon putting them in charge of new enterprises rather than their brothers who have not had this training.

Of course, you can't make hickory out of buckeye or a silk purse out of a sow's ear—and no amount of college training will supply brains or character and both are needed to make the successful man anywhere. You will remember that Cicero in that interesting oration on the Poet Archias says that "men have always disputed whether the training of the schools or natural ability were the more important element in the highest success of men, but they are all agreed that when to great natural abilities are added the qualities which training can produce, something rare and marvelous is likely to appear."

So here, the Government, and large and small industry in its wake, acknowledges the immense advantage of school training over the haphazard training of practical business, and so called practical work on the farm, in the bank, in the shops, in such a way that it will impress the imagination of even the eighth grade boy or girl in our public schools.

After the war, in my opinion, the American people will recognize as never before the advantages of systematic school training long continued as an element in preparation for life. This will make a new world—the world in which you will have to live—which will make it easier for you to live—and, above all, will make it possible for you to do greater things than we

have done. And so I congratulate you on this outlook and these prospects.

You are going to face enormous burdens in your work—far heavier than any we have had to carry in our generation. You will answer the call I am sure.

I congratulate you again my young friends in your coming into your majority, in your beginning your active, independent life in a world which will be vastly different and in my opinion vastly better than that in which we have been living.

You come in during the greatest war in the history of the human race. It may be you come in at the real beginning of the war in order of time or about the middle of it or as, I believe, toward the close—and toward a victorious close for us. Be that as it may, you are still young and will see the benefits it will work out and you will profit by them.

Other wars have been waged in the name of freedom and humanity. They have often resulted in a freedom for one nation which enabled it to lord it over other nations or enabled its privileged classes to reign more absolutely over the lower classes of the same nation. Other wars have united many nations in pursuit of the same end, viz: the overthrow of a power seeking to establish universal dominion; and the overthrow of such a power has been followed by a kind of national freedom which was entirely consistent with the growth and maintenance of autocratic forms of government.

The history of the French Revolution furnishes a striking illustration of this form of development.

The republican armies of France went forth, more than a century ago, to the conquest of the world with the sentiments of liberty, equality and fraternity upon their standards. They were greeted with enthusiastic cooperation in some places, and with only half-hearted resistance in others. And victory perched upon their banners along the entire boundaries of the republic.

But the times were not ripe for the full realization of this magnificent dream. And

Napoleonism succeeded republicanism and the idea of universal dominion overcame the notion of equal rights among nations and men.

The uprising of the nations against Napoleon was in the name of freedom and liberty. The battle of Waterloo brought national freedom from Napoleonic dictation but did not bring political, religious or industrial liberty to the masses of the people in Germany, Russia or Austria.

On the contrary, the dynasties on the thrones of these nations succeeded at the Congress of Vienna and in the years immediately following in organizing a combination of autocratic and despotic power to crush out every possible semblance of political liberty for the masses of the people in those and other nations. And the Holy Alliance, born of most unholy parentage and guilty of the most unholy acts, was to turn back the wheels of progress and bring to naught as far as possible the designs and purposes of the Great Revolution.

And in large part, it succeeded for nearly half a century—this we should not forget at this juncture—in repressing all movements of progress toward the realization of these great ideals.

Now we can not conceal the fact that there is a certain fear on the part of many that some such result may come out of this conflict.

I do not share this fear. The world conditions today are vastly different from those of a century ago. Then the majority of nations had in form and fact governments autocratic or aristocratic; today they are democratic or rapidly becoming so. Then the world fear was of democracy. Today, it is of autocracy. Then the real superiority in arms and men was on the side of the autocratic nations—today it is on the side of democratic nations.

The representatives of the nations at Vienna were men of the stripe of Tallyrand and Metternich and the like of them. Today at such a conference they will be

Woodrow Wilson, Lloyd George and Clemenceau and the like of them.

But the guaranties of a different outcome are after all vastly greater and more certain than the personality of individual men even though they be as great as these three.

Slowly and irresistibly the issues have framed themselves in this fierce conflict so that the nations one after another have lined up and pledged their lives, their fortunes and their sacred honor to the maintenance of free government and fair treatment among all nations and all men. Nothing like it has ever happened before in human history.

The vast majority of nations are now marching together shoulder to shoulder committed to the defense and full realization of the principles of our Declaration of Independence: that all men are born equal and are entitled to certain inalienable rights among which are life, liberty and the pursuit of happiness, carrying high aloft on their banners the slogan of liberty, equality and fraternity to all men!

And victory sooner or later is sure to these legions with this legend.

The Germans may possibly take Paris; they may possibly take the Channel ports; they may possibly invent a gun which will lay London in ashes—nothing of this sort seems to them impossible. But it will all be in vain! The stars in their courses are fighting for us even though now they be dimmed by clouds and mist.

The greater the German victories, the surer, the more complete, the more irretrievable their ultimate defeat.

The farther into France they march, the longer for them the way home—though they may cover it in the return far more rapidly than in the onset.

The victory of our program over that of the Central Powers is as sure and certain as that there is a sun in the sky or a God in heaven.

Now what is this program whose realization will make for us, that is, for you and your children and your children's

children, a new heaven and a new earth here on this globe and during your lives?

First of all we, that is the Allies, are committed to the creation of a real international law, not a mere collection of precedents, illuminated or darkened by the comments of professors of international law in German or Russian or French or American or English Universities—but a real code of enforceable precepts based upon ethical principles.

A code in which the "might of right instead of the right of might" shall be so integrally incorporated that no doubt shall exist as to the principle on which it is based. We are all now committed to the support of putting the idea of law—as meaning something more than a disputed custom into international relations; to vindicate for righteous law the claim to be the only real foundation stone of all national and international action; to substitute the reign of law dominated by ethical considerations for the reign of might and force based on national selfishness—to put in the place of the idea of the supreme self-determining, uncontrolled, unmoral, unethical, or if you please, supermoral and superethical nation, the notion of a moral being, subject to the reign of moral law, regardful of the rights of other nations and of individual human beings, sensitive to the ever-purifying and ever-rising standards of justice and mercy and fairness in the conduct of international affairs.

As a nation, subject like other weak human organizations to occasional lapses, we Americans have stood for these things—we have held high these standards in our courts, in our administrative departments, in our legislatures, and now, thank God, the whole strength of the Republic, the entire fortunes of its citizens, its sacred honor and mighty traditions are lining up on the bloodstained fields of France in furtherance of these ideas.

Nay more! The President of the United States has voiced these sentiments in lofty and inspiring language. He has read the deepest thought of the American

people and formulated it in a way to lead each of them to say "that is exactly what I think," and with that, the nation has become unified and strengthened and exalted.

With this formulation of our views and sentiments we entered this great conflict and immediately our Allies accepted our statement of this issue and thus it has become the rallying cry of the oppressed nations throughout the world and all these great powers, England, France, Italy, Japan, China, and the numerous smaller nations, have solemnly undertaken to observe these principles.

It will be a new world when they shall have been formally adopted and put into practice as they will be at the end of the Great War.

In the second place, this war in its outcome will, in my opinion, give an immense impetus to the movement for democratic government among the sons of men. It will raise it and exalt it as the only possible form of the highest type of human political organization. It will hold it high advanced as the ideal toward which we should strive with all our might and strength and soul. All monarchical or aristocratic remnants of previous stages of evolution are destined, in my opinion, to disappear—nay must disappear, and this war will go a long way to clean them up. If monarchy must be restored to save Russian society or China from dissolution, it will frankly be recognized as only a temporary measure to be gotten rid of as soon as Russia and China have reached such a development as will enable them to dispense with these crutches.

Now I believe that this immense impetus to free government is going to produce wonderful results of many different kinds here in our own society which will make it infinitely easier for the man dependent on his own exertion to get on in the world than it now is.

We have been conceiving the liberty spoken of in the Declaration of Independence in terms of political liberty, in terms



of freedom from legal interference. We are coming to see that that is only a small part of liberty. Liberty is something positive, and not negative. Economic liberty, intellectual liberty, spiritual liberty are as real necessities of a life spent in pursuit of happiness as political liberty itself.

A society in which every man is free to race ahead as rapidly as he can without reference to his neighbors, except to get ahead of them, is necessarily a society in which the vigorous, able, keen, alert, strong may ultimately reduce their brethren less favorably endowed with brains, nerves, and muscles to the position of a thoroughly exploited class—and such a society can not be called a democratic society in any true sense even though political liberty be fully established and protected.

Now, this war, in my opinion, is going to change the face of human society in many important respects, through the agencies it will create or energize to protect and foster the rights of the great mass of the people. And as you will be the people or a part of them you will profit by all such development.

As a concrete illustration of what this may mean, take the attitude of the English Labor Party toward this war. "We are willing," their leaders declared, "to mobilize labor to the limit in prosecution of this just undertaking. But you should not ask us to sacrifice more, relatively speaking, than other classes. And you must therefore guarantee to us that we shall be left at the end of the war in the same position of relative advantage in fixing wages, hours, and the terms of employment as we occupy now."

No such demand was ever made before in any war. The Government made this promise. The fact that it can never really carry out this promise fully and explicitly is not of nearly as much significance as the fact that it really made the promise in good faith; nor as the fact that giving such a promise indicates a new attitude on the part of the British Government toward the demands of organized and un-

organized labor. The action of our own Federal Government in all such matters from the passage of the Adamson Law to the present is equally striking and significant.

It will be a new world in which you will live and move and have your being. Your burdens will be heavy, your tasks enormous, but your opportunities wonderful.

And it is on these *opportunities* I would congratulate you. You are privileged to live and work in one of the greatest eras of human history and to become a part of this country's life and of this era's movement.

I know not how other men think about it, but as for myself I thank God I was born in the United States of America. None yield more honor than I to those small nations like Athens and Switzerland and Holland and Belgium which have written their names high in the list of those which have deserved well of mankind. But I rejoice in our boundless prairies, in our mighty rivers, our lofty mountains, our endless stretch of sea coast. I draw a fuller breath in contemplation of this mighty realm of which I am a part. I am exalted in spirit as I move over these never-ending railway lines and see these infinite harvests—and dream of what this people will be and do when it finally awakes to its opportunities and to its obligations to mankind.

My heart thrills with pride as I reflect that I am a citizen of the country which produced Washington and Lincoln and which, having produced them, knew how to honor and magnify their names. I glory in the recollection that it was my country which produced a Grant and a Sherman, a Lee and a Stonewall Jackson. I rejoice in that long list of victories, military, moral, and spiritual, by which my ancestors helped to settle and conquer and civilize the wilderness.

No victories at golf or billiards or lawn tennis, or even football or baseball—no pleasure in fine horses or automobiles or

of any or all the ordinary pleasures of life—ever satisfied me as these impalpable, imponderable delights of American citizenship have done.

They are going to be enormously increased for you and yours as a result of this Great War and its consequences. The names of many heroes will come forth from the mighty womb of time to multiply and strengthen our manifold causes for joy and pride in our country and its work. All this will be uplifting and helpful to you—a source of infinite strength and power in the mighty tasks you have to help solve.

I congratulate you once again and finally upon the chance you have to get into and become an integral part of this Great War and thus to share personally and immediately in its glorious results; be entitled to feel that you have been a living, working, contributing cell in this life process of the ages. It will exalt you, lift you out of yourselves and into higher regions of life and light.

No one will suspect me of underestimating the value of science and scientific investigation to our society; nor of setting a low value on the University of Illinois and its services to the State and country. But all this, to my mind, is of secondary importance—nay of far lower importance than that compared with the winning of this war. If we have been breeding and feeding and training a generation of men and women who will permit the Central Powers of Europe to dictate such a peace as they have hoped to win—vain, vain has been our work—and empty the achievement of building an American nation—for such a nation would be unworthy of Washington and Lincoln, would be unworthy of the men who died that this country might be created, or the men of that far greater army, who died that it might be saved. Ah! young men and women, if you fail to put forth your best efforts to help win this war, you will regret it as long as you live. You will be ashamed to tell your children and your

grandchildren that you stood aside and let this great movement of progress sweep on, and looked upon this drive for human freedom with apathy, indifference, or actual hostility.

Perhaps you do not realize fully what it all means.

Just remember two or three things and let them sink into your souls. I shall not undertake to describe the remote causes of the war; I can not even undertake to give a brief history of its rise and progress. Like other great wars the history can not be written for a century to come. But a few things are now clear and can be known of all men:

1. Germany began this war, and that in two senses. It refused to prevent it as it might have done; and it actually first invaded a foreign country.

2. It invaded a small, defenseless, peaceable country whose neutrality it had guaranteed to protect.

When this country resisted, it attempted to break its resistance by a policy of terrorism. War is horrible enough at best, but directed not at armed forces but at helpless civilians in order to frighten them into inaction or to serve as an example to other peoples—it is unspeakable.

Germany not only conquered Belgium but it has laid heavy tribute upon it for attempting to defend itself, compelling it, moreover, by forced contributions of labor and money and material to impoverish itself in order to help Germany defeat France and England.

3. Germany has done the same thing in all countries she has overrun.

4. She proposes to make the peoples she conquers pay the cost of their being conquered. Stop to think what that means.

5. She proposes to conquer France and England and then she will take the United States. Are you willing that this should be done? If not, then into the conflict with body and soul!

6. Germany has proposed to take the coal and iron mines of Belgium and north-

ern France and annex them to the German Empire. Not content with this, she has proposed to drive out the entire Belgian and French population from these territories and let what is left of Belgium and France pay these poor devils for the land and houses Germany has taken. Has there ever been a more cruel or cold-blooded proposition than this in the history of Christian nations?

7. The doctrine has been enunciated by her philosophers that Germany has a moral right to take any territory which in Germany's opinion is necessary for her welfare or convenience. Can you make any answer to such monstrous propositions except "Back to your own boundaries."

If we had failed to help France and England in their extremity against this menace to all they hold dear, it would be a righteous judgment of God upon us, that Germany should finally do to us what she is trying to do to France and England.

I know nothing personally about the atrocities attributed to the Germans in Belgium and France and Roumania—eye witnesses have however reported dreadful things—but I know something of atrocities which occur in this country at times in spite of our laws and our police, and I can imagine what may happen in other countries when because of war, laws and police are set aside; and the soldiers are ordered to make an example of a man, a woman, a child, a town, a province or a whole nation. God forgive us if we permit any nation with this military and moral code to overrun the civilized world—or rather may he not forgive us, but punish us as we deserve!

One other thing, young friends, not only is the winning of this war necessary to protect civilization in Europe, and to protect our own homes, our altars, and our fires from devastation and destruction; but the definite winning of this war at this time will put forward civilization a great way. This is a critical time in hu-

man history. If the Central Powers win, the ball of human civilization will roll down the hill of time, and we must again take up the Sisyphean task of pushing it up again toward the top.

If we win, we shall secure the blessings of civilization thus far attained and add enormously to the certainty of steady and rapid upward progress.

Surely, it is worth all you have in time and strength and nerve to help win this great war. If you are of the proper age and strength and freedom, seek the trench unless the Government wishes you elsewhere, and calls you for other work. If you can't do this, do something else, but everywhere and all the time, work at this one supreme problem of winning the war.

I never wished to be older for but the one reason that I might have carried a musket in our Great Civil War; and I have never wished to be younger for but one reason, that I might now be serving, a machine gun in the blood-stained fields of France. My elder son has gone into the navy; my younger son is about to enter the army service; my son-in-law is already in, and with him, the entire physical strength of my family is in the service, and I am doing what I can to recruit it.

Oh, my young brothers, I envy you your chance to get personally into this great world conflict on the side of right and justice and mercy. If I had been a little older, I might have fought at Vicksburg or Gettysburg; or a little younger at Vimy Ridge or the Marne. And if I had fallen in the Civil War, I should have joined that great and glorious throng who have made it such a privilege for us to be American citizens; and if I had fallen at the Marne or Vimy Ridge, I should have entered that noble army who died that their brothers across the sea might live.

I wish you all the greatest good luck! the highest earthly good fortune and prosperity, consistent with the highest moral and spiritual development of yourselves. I can wish you no greater good

than that somewhere in this great struggle you find a place to serve this university, this Commonwealth, this nation, the whole world by your lofty patriotism and devotion to all that is true and beautiful and good.

Some of you will go to Flanders. I pray God you may return with the laurel wreath for faithful and distinguished service long to bless your family and your country. Some of you will doubtless fall there, and lie among the poppies of the Flanders fields. You will have taken up the torch dropped by your predecessors and helped carry it on to victory. Our love, our admiration, our honor, our gratitude and that of all posterity will follow you as you make this great sacrifice!

John McRae has called to you in these beautiful lines from those who lie in Flanders fields where he now lies himself:

In Flanders fields the poppies blow  
Between the crosses, row on row,  
That mark our place, and in the sky,

The larks, still bravely singing, fly,  
Scarce heard amid the guns below.  
We are the dead; short days ago  
We lived, felt dawn, saw sunset glow,  
Loved and were loved, and now we lie  
In Flanders fields.

Take up our quarrel with the foe!  
To you from failing hands we throw  
The torch; be yours to hold it high!  
If ye break faith with us who die  
We shall not sleep, though poppies grow  
In Flanders fields.

Not like those Roman Gladiators who  
they entered the arena turned and chanced  
to the Emperor:

*Morituri te salutamus!*

We who are about to die salute thee  
but with the glad cry,  
"We who are about to live salute thee!!"  
you rush forward into this conflict, and  
if to lie in Flanders fields among the poppies—then still to have life and to have  
it more abundantly.

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XVI

DECEMBER 16, 1918

No. 16

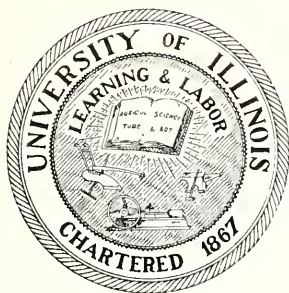
Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for Mailing at the special rate of postage provided for in section 1103, Act of Oct. 3, 1917, authorized July 31, 1918.]

## Italy and the Peace Conference

BY

PAUL V. B. JONES

Associate in History



Price 10 cents

PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
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## ITALY AND THE PEACE CONFERENCE

Now that peace terms are under discussion, some of the profoundly difficult problems which must be handled by the representatives of the nations assembled at Versailles are becoming plainly outlined. Among these problems, none are more knotty and fraught with serious danger than those involving an equitable adjudication of certain of Italy's war claims. Because to date Italy insists upon the fulfillment of these claims to the very letter—upon her utter pound of flesh, that country is assailed from all quarters, as she was denounced in 1915, branded again for the narrowest selfishness, and roundly rebuked for an imperialism which cannot be squared with the democratic ideals for which the world has been told it was fighting. The country's spokesmen, on the other hand, competent and otherwise, seek to refute these harsh aspersions by demonstrating in speeches and writings the justness of her objectives, while the arch-opponents of her peace programme—South Slavs, Albanians, and Greeks, vigorously use like measures to anathematize them. Meanwhile the report comes that Italy's armies are not to be demobilized, together with curt assertions from certain Slavic quarters proclaiming a fearful readiness to accept again, if it must be, so grim a solvent as war. Such indeed, is the heat already engendered since the signing of the armistice, an ominous premonition of stormy controversy, or infinitely worse, ahead.

What then are these war claims, and what threatens to prevent their full attainment? Stated briefly, Italy, in this developing world crisis, has sought consistently to make her national existence secure. That has been her great purpose. To gain it meant for her principally reaching the following difficult objectives—first, the completion of her unification through the incorporation of Italia Irredenta so called, that is, the Trentino, certain lands about the lower Isonzo river and Trieste, and second, the attainment of supremacy in the Adriatic sea. This latter ambition is in truth part and parcel of Italian unification also, in so far as it, likewise, involves securing Trieste; further than that, however, its consummation means the establishment of Italian dominion over Dalmatia, coast and islands, and the attainment by Italy of a firm hold on the same side of the Adriatic in Albania. The vital importance of these objectives for Italy's welfare becomes manifest upon a brief analysis of them.

Italy, since 1871, has looked forward to the completion of her unification on purely sentimental grounds; certainly it would be highly gratifying to her to feel that all the regions once a part of her ancient country, and at present inhabited by a majority Italian population, were incorporated forever in the motherland. Irredentism, however, has played its tremendously important role in modern Italian life not on sentimental, but on eminently practical grounds; these coveted bits of territory under alien control have left Italy with threatened frontiers in the north and north-east. A glance at a map, or a survey of Italian military operations in the war, will reveal the very real danger which the country has had to face because of Italia Irredenta. The Trentino is a powerful jut of most difficult mountainous country thrust into northern Italy, almost inaccessible to attack from the south, as Italy's campaigns in that theatre demonstrated, while, on the other hand, the rich Lombard plain, the heart of Italy, lies practically at the mercy of its possessors. Nor is the situation much better in the Julian Alps region, to the north-east, where again there is no satisfactory frontier. This unfortunate state of affairs dates from 1871. Italy's unification was accomplished tumultuously and piecemeal between 1859 and 1871, contingent for the most part upon intermittent foreign support—a process affording no time for the careful delimitation of frontiers.

And what of the Adriatic? Italians have long been of the opinion that the country controlling Dalmatia, *ipso facto*, held their country likewise in its grasp. The Adriatic is a great arm of the Mediterranean, approximately five hundred miles long, with a mean breadth of one hundred and ten miles, narrowing down however, at its southern extremity, across the Straits of Otranto, to a stretch of water some forty-five miles in width. The excellent Albanian harbor, Valona, one of the best in Western Europe, the Gibraltar of the Adriatic as it has been called, perfectly commands these straits. This sea washes an Italian shore, low-lying, shallow, exposed to the vast sweep of the north wind, and practically harborless. Venice and Brindisi lie almost at its respective extremities; neither is a first class haven, while Venice, furthermore, has its usefulness as a port constantly impaired because the four rivers, Isonzo, Piave, Adige, and Po, draining great reaches of the Alps and Apennines, steadily bring down into the head waters of the Adriatic great quantities of silt. The Dalmatian coast, on the other hand, is high, irregular, protected by a long fringe of islands, and affords an excellent harbor for every mile of shore.



As modern states have been organized, physical features like these must command urgent attention on the part of countries constrained to put up with them, and Italy is no exception to this rule. Under the best of circumstances worry on her part over her general insecurity is readily comprehensible. Moreover, how her fears on this score have grown into a terrible incubus may likewise be understood, at least, when it is recollected that until yesterday, practically, Italy's hereditary enemy commanded these keys to her house. Austria and Italy indeed have never, in modern times, been friends, and this despite the Triple Alliance which Italy felt herself compelled to join in 1882 because of political exigencies beyond the scope of this discussion.

Nor is this all: Italy has feared Austria not only because of the latter's position squarely across her most vulnerable parts, but also for the additional reason that since 1875 she has seen in Austria a country with a powerful ambition to entrench herself still more firmly in the Balkans, thus jeopardizing the more Italy's security. In 1887 the Italian statesman, Crispi, said to Bismarck:

“We Italians must be interested in the near Eastern question. If the great powers, under agreement, would formally renounce all conquest in the Balkans, and declare that any territory taken from Turkey should be left autonomous, we would enter no objection to those arrangements. It is stated, however, that Russia, to attach Austria to herself, offers her Bosnia and Herzegovina. Italy can never permit Austria to occupy those territories. In 1866 Italy was left without a frontier in the eastern Alps; if now Austria secures these provinces, which would further fortify her on the Adriatic, our country will then find itself more than ever exposed to an invasion. It will be in a trap.”

Yet the Congress of Berlin, arbitrarily “arranging” southeastern Europe after the Russo-Turkish war of 1877-1878, allowed Austria to “occupy” Bosnia and Herzegovina—a hard blow for Italy; nor could the latter country accept with any more assurance Austria's annexation of these Balkan lands in 1908.

Such well known facts in part explain Italy's intense anxiety when Austria sent her famous ultimatum to Serbia, unloosing the World War. Likewise they explain Italy's conditional neutrality upon the outbreak of the war; her seizure of Valona in Albania, in December, 1914; her nine months of bootless negotiation with the Central Powers through

which she sought to guarantee Italia Irredenta and Adriatic security forever; and, finally, her signature to the now notorious Secret Treaty of London, of April, 1915, and declaration of war against her former allies.

The country's policy has been consistently one of national defense. And today, though ancient dynasties have fallen, and amid their ruins tiny states helpless in their puny infancy have been born, Italy's geographical features are unaltered. Shall they never again menace her security—nay, shall they leave her in peace for the next twenty-five years? What historian dare hazard such an assurance! Therefore it is that to-day Italy still claims the fulfillment of these provisions of her bond.

Where lies the difficulty in a peace settlement for Italy mainly along these lines of the Secret Treaty of London? Just here. The Great War, with its outstanding slogan "making the world safe for democracy," has been won for the Allies and America, in no small measure, through the reaction of this magnificent battle-cry on numerous oppressed nationalities groaning under the hard dominion of the Central Powers. For the most part, these peoples, with racial and national instincts keyed high by repression, have hailed this bloody struggle against autocracy as a veritable crusade for liberty—a holy war which should make them free. With intense enthusiasm they have grasped the basic principles of democracy, have fought and died with astounding heroism for these fundamentals; now the war is over, and they too demand the fruits of victory. Across the Adriatic from Italy are several groups of these peoples, determined to be free and independent, and it is the attainment of this freedom and independence which must clash with the fulfillment of Italy's claims. These peoples are the Jugo (or South) Slavs, and the Albanians.

The South Slavs, that is, the Serbians, Croats, Slovenes, and Montenegrins, of whom the Croats and Slovenes have been under the jurisdiction of Austria-Hungary, number presumably some 13,000,000 souls, and constitute a heavy majority of the population in much of the land essential to Italian supremacy in the Adriatic, as Istria and Dalmatia. While to date there have been many evidences of antagonisms between these Slavic groups—chiefly due to cultural and religious differences, their political position, and the war itself—on the other hand, signs of a strong unanimity of feeling, a real national consciousness, are yet more obvious. All speak the same language, with slight variations;

their racial characteristics are the same; they have suffered together, and together they must be free.

In July of 1917, authorized representatives of Serbs, Croats, and Slovenes issued an official statement through the Serbian Press Bureau on the Island of Corfu in which they affirm that “. . . . the desire of our people is to free itself from all foreign oppression and to constitute itself into a free, national, and independent state, based on the principle that every people is free to govern itself . . . . .” The declaration then describes the “modern and democratic principles” on which this state shall be founded. Yugoslavia, according to this programme, shall be “a constitutional, democratic, and Parliamentary Monarchy,” with the Serbian dynasty for its royal house. It is to include “all the territory where our nation lives in compact masses and without discontinuity, and where it could not be mutilated without injuring the vital interests of the community.” Equality before the law, religious toleration, and universal suffrage are likewise proclaimed.

A year later, Jugoslavs in America had a great celebration at Washington, the principal feature of which was the raising of a Yugoslav flag—an emblem on which were interlaced the Arms of Serbia, Croatia, and Slovenia. Prominent natives made speeches befitting the great occasion; peculiarly significant among the addresses was the stirring appeal for an oath of allegiance to the new banner urged upon all Jugoslavs present, by Don Niko Grskovitch, President of the Croatian League of America.

In September, 1918, the Jugoslavs declared their independence. They set forth in the remarkable manifesto embodying this act that ethnically they are one nation, and that they base their national rights and claims on that fact. Accepting entirely the principle of self determination, they demand for themselves “a peace which shall bring us union, independence, and liberty.” Since this important step, the state of Yugoslavia has been rapidly taking shape. Late in November the National Council at Agram appointed Prince Alexander of Serbia as Regent. A State Council, comprising all the members of the Agram Council, fifty delegates from Serbia, and five from Montenegro, was summoned to meet at Sarajevo, and appointed a Yugoslav cabinet. As soon as conditions are settled enough, elections are to be held for a Constituent Assembly which is to sit at Sarajevo, determine the form of state to be set up, and adopt a constitution. The fundamental irreconcilability between all this development and the Italian programme for Adriatic supremacy is clear.

Next, what of Italy's grip on Albania, likewise recognized by the Treaty of London? An Italian "protectorate" over Albania must thwart the national aspirations of that people. Unfortunately this most interesting but primitive folk is largely inarticulate. Turkey has controlled the country for over four hundred years, so that there has been practically no opportunity for progress; instruction has been quite unknown. Contrasted therefore with the cry of the South Slavs, whose eager passionate yearnings for national independence have found wide response and sympathetic approval throughout most of the civilized world, the thin small voice sounding Albania's longings pipes nearly unheeded. Nay, those are not wanting who affirm that Albania has no voice, no longings; and these interpreters of peace conference problems outline a settlement for Albania largely based on Italy's desire for dominion there, taking cognizance too of the claims of Greece and the Yugoslavs on parts of the country. What of the Albanians themselves? They also have responded strongly to President Wilson's pronouncement on behalf of oppressed nationalities. Having fought and died for liberty and independence, they now look forward tensely to that cherished freedom almost within their grasp.

Evidences of a national feeling among Albanians are not wanting. When, in June of 1917, Italy proclaimed Albanian independence "under the shield and protection of the Italian Kingdom," the Albanian paper, *Dielli* (the Sun), mouthpiece of the National organization in New York City, spoke as follows:

"The proclamations by Austria and Italy, which came one after the other, are neither welcome nor well sounding. These powers are disputing between them the right of protection over Albania. The way in which each desires to reorganize and dominate Albania cannot meet our approval. We acknowledge with boundless pleasure any friendly protection, but we cannot even for a moment agree that Albania be reduced to the state of a vassal country. The Albanians are fighting for the real independence of Albania, and for this we can rely for assistance on her friends only. The Albanians desire that Albania should be for the Albanians. They do not wish her to be the tool of either Austria or Italy. Such a servile Albania would be the worst element in the Balkans, a fire-maker in the already troublesome peninsula."

The Albanians again have been decidedly conscious of those arbitrary adjustments, like that put into effect by the Ambassadorial Conference at London in 1912, which have placed sections of their country with the inhabitants under foreign jurisdiction; thus, for example, certain leaders of the country have requested Italy to represent them at the peace conference and to demand for them Epirus and parts of Serbia.

Furthermore the Albanian Federation in America, with headquarters in Boston, recently issued an authoritative statement to correct distorted views of their country and people. It surveys with evident pride the remarkable ancient and modern annals of this, the oldest people in western Europe, protests against their unfair treatment at the hands of their neighbors in most recent times, notes that the Albanians have made common cause with the Allies, that many of the seventy thousand Albanians in America are in service in the American armies, that, all told, their people have purchased nearly \$1,000,000 worth of Liberty bonds, thereby attesting the loyalty of this hard-working element in our population to their adopted land; and concludes with the noteworthy declaration that they look to America and the Allies at the peace conference for the restoration of their country's independence within ethnical boundaries.

Such are obvious witnesses of a national consciousness on the part of this people. The evidences may be few; that there are any such, under the circumstances, is highly significant. And finally, the little trustworthy information available about this people shows them to be a folk with intensely strong racial characteristics. Centuries long they have maintained themselves in their mountain fastnesses against successive waves of invasion, ultimately either absorbing or driving out their would-be conquerors. With a like tenacity, successive generations of Albanians resident in Greece and Italy through hundreds of years adhere staunchly to their native speech.

Signal virtues are theirs also, despite their tribal organization with its endless local warfare, their blood feuds and their gross ignorance. The following quotation speaks for itself:

“Brigandage, despite the prevailing myth on the subject, is practically unknown in Albania. The native is too proud and chivalrous—and these are his two main national characteristics—to lower himself to the condition of highwayman. . . . . As to the reputed fanaticism of the

Albanians and their constant religious strife, it may be said that religious toleration exists in Albania to a degree found nowhere else in the Balkans. Divided as the Albanians are into Moslems, Roman Catholics, and Greek Catholics, they have always managed to get along far better than Catholics and Protestants in Western Europe. In Albania there are today families in which one brother is a Moslem and another a Christian, yet they live in perfect harmony within the walls of the same home. In general the people of Albania are characterized by an innate and irresistible love for liberty, by intelligence and practical spirit, and by great eagerness for progress and civilization.”<sup>1</sup>

Such, in their outstanding features, are these sets of conflicting interests which point themselves more sharply day by day. On the one hand the indisputable national rights of Jugoslavs and Albanians, and on the other Italy's claim to the whole of Istria, to a large part of Dalmatia, and to sections of Albania, which cannot rest soundly on the firm basis of nationality whatever may be said for Italian majorities in various regions; claims, which despite certain good historical foundation, must in the last analysis find their truest *raison d'être* in the inalienable right of every nation to safeguard its own well being.

Surely, under the old diplomacy, Italy's objectives are entirely defensible; could she today be assured that the world has indeed been made anew, certainly she would relinquish her Adriatic programme with a profound sigh of relief; unfortunately that sore distraught country, weak and impoverished, cannot secure so splendid a conviction from allied statesmanship! Should Italy,<sup>2</sup> therefore, finally decide so to modify her claims that the young nations, her Adriatic neighbors, may be free to work out their several destinies without let or hindrance, in full independence, then shall this venerable mother of our Western civilization be hailed throughout the world for her profound faith in a new era to the ideals and security of which she has made heroic sacrifice!

<sup>1</sup>“The Albanian Nationality”, Constantine A. Chekrezi (formerly secretary to the International Commission of Control for Albania) in *Current History*, November, 1918.

<sup>2</sup>Signs indeed are not wanting which indicate a strong current in Italy in this direction. Over half a year ago now, a group of her intellectuals, including the historian Salvimini, certain Deputies and other notables, acting semi-officially, reached what promised to be a highly satisfactory agreement with the Jugoslavs. Both sides made concessions, or at least indicated a willingness to yield points in their conflicting ambitions. Presently again the horizon was overcast, and until the present all available

information indicated intense antagonism. Now however comes the news of the resignation of several members of the Italian Ministry, conspicuous among them being Leonida Bissolati, who, in highly commendable manner publishes his reasons for breaking with the Government. In short, he disagrees radically with Baron Sonnino, Minister for Foreign Affairs, in regard to the peace settlement. Whereas Sonnino insists upon the complete fulfillment of the terms of the Secret Treaty of London, Bissolati would make great concessions to the Jugoslavs, yielding Dalmatia to them, for example.

In addition, an auspicious report comes via Paris of "the first meeting of the Italian Society for a League of Free Nations, which has 150 branches in Italy, and includes in its membership nine Ministers, among them Premier Orlando, former Premier Boselli, General Busati, chief aid to the King, and Senator Mattioli Pasqualini."



KEY TO MAP—Shaded area shows extreme Yugoslav claims. Heavy line marks limit of Italian claims. According to the treaty of London, practically all the Adriatic coast from the southern limit of the Italian claim in Dalmatia, to Durazzo, is to be neutralized, with relaxations in favor of Montenegro.





# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XVI

DECEMBER 23, 1918

No. 17

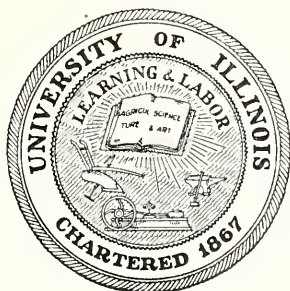
[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103 Act of October 3, 1917, authorized July 31, 1918.]

## The New Arab Kingdom and the Fate of The Muslim World

BY

ALBERT TEN EYCK OLMSTEAD

Professor of History



Price 10 cents

PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA



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WASHINGTON, D. C.

## THE NEW ARAB KINGDOM AND THE FATE OF THE MUSLIM WORLD

In the autumn of 1916, a bored newspaper correspondent at Washington amused his readers with an account of a new power, somewhere in Arabia, whose request for recognition had caused our Department of State no little search to discover its exact location. Shortly after, professional orientalist were afforded that first of all proofs that a state actually exists: stamps marked "Hijaz Post." Since then, the metropolitan papers have occasionally devoted two or three lines to the advance made by the sultan of that country east of the Jordan and little more has been contributed by our periodicals.

Prophecy has never been more at a discount than at the present, and yet we may venture the prediction that here we have an event of world meaning, that problems are raised which America must aid in settling, that the historians of the future may see in this event one of the most important results of the war. Americans have devoted little enough attention to the Near Eastern Question as a whole; the Arabian phase is virtually unknown.

What has happened is no less than the rebirth of Islam. We all know from our school books that Islam began with Mohammed in Mecca, that under his immediate successors it conquered the greater part of the civilized world, and that there was developed within the century a civilization without a contemporary rival. We may further remember that the original Arab rulers were supplanted by Persians, Moors, and Turks, and that the civilization was transformed and then began to decline. Here our knowledge is likely to end. Few of us realize that Islam is one of the most potent forces in the world today, that it counts its adherents by the hundred millions, that in the waste places of the earth it converts its hundreds where Christianity wins its tens, that its followers occupy a belt of the best territory on earth, extending from Morocco and the Sudan to China and the Philippines. What happens in Mecca becomes matter for more than amusement when we realize that hundreds of thousands of men under our own flag feel exactly the same sentiments toward that city that other millions of our fellow-citizens feel toward Rome.

Contrary to the general belief, the "Unspeakable Turk" has his good points. He is a soldier without superior, has much administrative

ability, and, where he has not been corrupted by intermarriage with other races or by so-called "Liberalism" in the guise of the pro-German "Young Turk," he is, man for man, the equal of his western brother of similar social standing. Unfortunately, he is a northerner ruling southerners. He is slow, stolid, solid, rather contemptuous of the man from the south who is quicker in guile as in the field of the intellect. He takes over and patronizes, by virtue of his being a better soldier and ruler, a culture he is incapable of producing. To the man of the south, he is a northern barbarian, speaking a language which has no connection with the sacred speech used by the Prophet and preserved to posterity in the Koran. He clings to customs which are only nominally glossed over by the Sacred Law and is no fit successor to the Prophet. The Arab has never forgotten that his was and is the sacred language, that the Koran can rightly be read only in Arabic, that from his race came the Prophet, that in his land are found the four holy cities of Mecca, Medina, Jerusalem, and Hebron, and that all the cities most intimately connected with the glories of the Caliphate—Alexandria, Damascus,<sup>6</sup> Baghdad, still speak Arabic. He would be more than human did he not look forward to the day when once more from Mecca would the Law go forth.

In the eighties of the last century, Islam seemed about to follow Turkey into dissolution. That it did not do so was largely the work of Abdul Hamid, who first discovered the worth to the state of a pan-Islam in which Constantinople might supplant Mecca as Rome had supplanted Jerusalem in the Middle Ages. History might today be profoundly different had this ideal continued pure and undefiled. Hungarian writers assisted in transforming the pan-Islamic into the pan-Turanian movement; but if Hungarian, Finn, and Russian Tatar were thereby won to Turkish support, the Arab speaking world was definitely alienated. Rebellion became chronic in the Yemen, in southwest Arabia, the most desirable part of the peninsula. Army after army was lost by battle, disease, and treachery. The Turkish Revolution of 1908, with its brief "Era of Good Feeling," for the moment checked the Arab movement, but it revived at once when the Young Turks, in their unfortunate imitation of western nationalism, began the Ottomanization of the Empire. Radicals went so far as to demand a Turkish translation of the Koran, the use of that language exclusively on trains, in newspapers, in private bookkeeping. By such means, the close connection with Hungary was continued, Bulgaria suddenly discovered

that the original Bulgars had been Turanians and so fit allies for the Turks, Muslim intellectuals in Trans-Caucasian Russia longed for the day when they should be restored to Turkey. To the debit side of the account must be placed the complete alienation of all the other nationalities in Turkey, Muslim equally with Christian. When the Great War began, the Arabic-speaking peoples were ripe for revolt.

Before any overt act occurred, Turkish officials seized and killed the Syrian leaders in several cities. Among the patriots thus executed were members of the tribe of the Sherif of Mecca, a descendant of the Prophet, and the official head of the sacred city. Already predisposed to revolt by the "Liberalism" of Enver Pasha and the Committee for Union and Progress, by their scarcely concealed agnosticism, and by the deliberate abrogation of provisions of the Sacred Law laid down in the Koran itself, the Arabs felt themselves provoked beyond endurance. In a ringing address to "all our Muslim brethren," Husein, the son of Ali, appealed to Allah as judge, in the words of the Book, mourned the loss of Muslim prestige brought about by the Young Turk fiascoes in Tripoli and the Balkans, and its present perilous position. He condemned the horrors of deportation, the murder of leading Muslims, the banishments and confiscations of property belonging to the innocent families of victims. Then he told of the revenge taken by the Turkish garrison for the revolt of Mecca, how a shell fell but four feet from the very house of Allah, how the rug that covered the Sacred Black Stone was fired, the despair of the pious as they saw it and the killing of worshippers every day within the sacred precincts until worship was perforce discontinued. No westerner can realize the thrill of horror such sacrilege must produce in the breast of every true Muslim. Islam had not risen when the Turks, at the dictation of their infidel masters, had preached the Holy War. Henceforth, there could be no doubt as to the position every true Muslim must take.

The cup of Young Turk iniquity was full, and on the sixteenth of November, 1916, Husein was declared Sultan of the Hejaz and was promptly recognized by the Entente Powers. By their operations east of the Dead Sea, the Arabs did much to render futile the Turko-German advance against Egypt, thus saving the Suez Canal and the route to India and Australia. They played their part in the redemption of Jerusalem by drawing off troops at a time when these were desperately needed by the Turks. In the last campaign, they assisted the British in the great drive which carried the allies from Samaria to Aleppo.

The war in the Near East has ended in the complete triumph of our allies and only the political settlement remains. A son of the Sherif has arrived in Paris, has been assigned two delegates at the conference, and has given tea to American correspondents. Already we can see, at least in outline, the problems which must be solved. First, a new state has come into the world; and, whatever aid it may receive from the Entente Powers, it must be independent in every sense, or Muslim thought will be outraged. At present, it occupies only the Hejaz, the strip along the west coast of Arabia, with the holy cities, plus a line of advance up the Mecca Railroad to Syria, but its claims are far wider, even to Syria as a whole. Yemen is in anarchy, with the chance that the anarchy will be ended with some sort of British rule, for Yemen forms the back country to Aden, and Aden commands the exit of the Red Sea, the route to India. The center of the peninsula is the home of the fickle wandering tribes or of oasis cities ruled by emirs who may admit the Sultan as first among equals, but will not surrender their local autonomy without a struggle. Oman and the other states along the seaboard are more or less under British protection; Syria, Babylonia, Mesopotamia, are actually being administered by British soldiers; next door, across the narrow Red Sea, Egypt is a British protectorate; and India, with its hundred million Muslims, is likewise British, however much this fact may be hidden by native rulers with splendid courts. General Maude, in the proclamation issued after the capture of Baghdad, expressed the "hope and desire of the British people and the nations in alliance with them that the Arab race may rise once more to greatness and renown among the peoples of the earth, and that it shall bind itself together to this end in unity and concord . . . . that you may be united with your kinsmen in north, east, south, and west, in realizing the aspirations of your race."

Whether practical politics will permit the coming true of these and similar aspirations remains to be seen. The pure Arab is an extreme individualist, and there is much the same spirit among the others who speak Arabic. The Near East has rarely been a unity, and then generally under foreign control. If Muslim Arabs could for once be induced to abandon their old time desert individualism, there is still the fact that they do not comprise all the Arab speaking population, and that they are not a religious unity among themselves. The true Arab of the desert permits his religion to sit lightly upon him, and with the mass of the Muslim Arabs, is nominally Sunni or orthodox, though without

fanaticism. Babylonia is largely occupied by Shias, or Dissenters, who are among the fanatics of the world. Here are the sacred cities of the Persians, Kerbela, Nejf, Kadhemin, with their minarets plated with solid gold, their trade in corpses brought from afar to be buried in the sacred soil where once flowed the blood of Ali, martyred son-in-law of the Prophet. To them come bands of pilgrims, who will not give a drink of water to the fainting traveller, lest he defile the cup by lack of orthodoxy, who work themselves up into a frenzy in acting the sacred dramas which relate the death of Hassan and Hussein, the murdered grandsons of the Prophet, until the blood flows from the self-inflicted wounds, and the stranger betakes himself away for safety. Here are to be found the spiritual leaders of Persia, and from here came the impulse for the short lived Persian constitution. Babylonia is the port of entry for much of Persia's commerce, she is likewise the center of Persian life.

In the mountains to the north and east are the Nestorian Christians, further west are the Jacobites, both clinging to the remnants of their Syriac language and literature. Armenians press into the northern part of the Mesopotamian area, while many Christians now speak the Kurdish of their barbarous masters who roam the prairies with their flocks of sheep and goats, or exchange their black goat's hair tents for adobe huts without thereby abandoning their rapacious habits. For the most part, however, Mesopotamia is still virgin soil, for even in antiquity the land was tilled only close to the rivers. The problem today is that of the scientific conservation and use of water; this affects the problem of boundaries. At first glance, no finer example of a scientific frontier could be found, for the Armenian barrier range is almost a straight line from east to west, cut by few and difficult passes, and with the population on the two sides essentially different in type. Today, when irrigation is the great problem, we see that irrigation must be based on the Euphrates, not the Tigris, and that inevitably means the control of the Euphrates watershed far to the north of the barrier range by the power which owns Mesopotamia.

Central Syria affords a problem of more than usual complexity. The inhabitants of Mount Lebanon are among the best of the earth in physical and mental strength. Unfortunately, half are Christians, the other half Druses, an unorthodox Muslim sect, and warfare between the two is the one theme of Lebanon history. The Christians are largely Maronites, Syrians reconciled with the Latin Church, who have been

permitted to retain their liturgy in their native language and many of their peculiar customs in return for their recognition of Rome. As such they were protected by the French, the official defenders of Catholics in the Near East. When an unusually vigorous conflict resulted in the Damascus "massacres" of 1860, French troops were landed to "restore order" and the Lebanon was given local autonomy under a Christian governor appointed with the approval of the Powers. The denunciation of the Concordat by the French government ended the protectorate and the French flag no longer floated on holy days over every Catholic institution in Syria, but French influence continued strong and many of the Lebanese received their training in the splendid Jesuit university of St. Joseph in Beirut. The Druses, forced to look elsewhere for a defender, found one in the English, who long exercised great influence over their "brethren." In a secret treaty, soon after the outbreak of the war, the British threw over their allies and assigned the Lebanon to France.

For two generations, American missionaries have carried on work in the Lebanon which can only be termed magnificent. The Syrian Protestant College in Beirut has been a worthy rival of the Jesuit institution. American ways have been introduced by its staff of American teachers, the scientific investigation of the country has begun, on the football field the most diverse races and religions have learned team work and self-control. The lower classes have meanwhile migrated to America. No village in the most remote mountains but will furnish a man to salute you with "Hello there, you an American? I am an American too," to inform you that he came from San Antonio, Texas, or Fort Wayne, Indiana, to swear a little just to show you that he is a genuine American. In his house, he will proudly exhibit the papers which prove that he is "an American citizen, just like you." Long ago, some of these men dreamed of the day when America would oust the Turk, and now the New Syria National League demands a federated Syria, "from the Taurus Mountains to the Sinai Peninsula," and "that the United States assume guardianship and administration of Syria until such a time as the Syrians are able to perform the functions of full self-government."

America is again brought into contact with the Near East in Palestine. Zionism has received the support of many of our citizens of Jewish descent and there are few Christians but would rejoice that there is hope of a "Return to Zion." None the less, we cannot overlook the



obstacles to a Zionist state. The majority of the population of Palestine, descendants of pre-Mosaic Canaanites, are Muslims, and there exists a large sprinkling of Christians. The site of Solomon's temple is the third most holy Muslim shrine. When Jerusalem was taken by General Allenby, it was not handed over to the Jews. Instead, to quote his official report, "The Mosque of Omar and the area around it have been placed under Moslem control, and a military cordon of Mohammedan officers and soldiers has been established around the mosque. Orders have been issued *that no non-Moslem is to pass within the cordon without permission* of the military governor and the Moslem in charge;" Christian and Jew excluded from so sacred a place, and in favor of Muslims! The policy is clear. Equally clear is the proclamation which declared that the sacred shrine of Hebron, where Abraham, Isaac, and Jacob, with their wives, are supposed to be buried, "has been placed under *exclusive Moslem control.*"

The lands belonging to Muslim mosques and schools, to Christian churches and monasteries, add the complication of vested interest. Much of the remainder is owned by Christian and Muslim notables and they are up in arms over the new invasion. Massmeetings of Christians and Muslims have been held, protection has been demanded against forced sales under unfair conditions, and the use of Arabic as the only official language. This has been conceded in principle and Allenby has refused to register land transfers made since the occupation. Sir Syed Ameer Ali, probably the greatest living Muslim publicist, has strongly declared the Germanic origin of Zionism and has categorically stated the displeasure of Muslims at the change of policy. British policy in the east does indeed rest on Muslim support and when he points out the relative numbers of Muslims and of Jews in the world and the number who today support Britain, he brings forward what after all must be the most serious objection, from the British point of view, to an independent Palestine.

The clash of Muslim and Zionist interests is undoubted. We need not on that account believe them hopelessly impossible of reconciliation. Many of the Zionists are now stating that it is "not only unwise but positively unjust to ask the peace Conference for an immediate Jewish state. It was for them to ask, in the first place, for recognition by the world that Palestine was the Jewish land in the past and would again be the Jewish land in the future. They should ask for opportunities to bring the Jews back to Palestine. It would depend on the Jews

themselves to build up the Jewish commonwealth. When once Great Britain was appointed trustee, they would, in conjunction with Great Britain, prepare and carry out a detailed scheme for building up the Jewish Commonwealth. The Jewish land-holding must first of all be greatly increased. By democratic legislation this could be brought about, with due regard to the rights of all other inhabitants. There was ample elbow-room there, as the land was very sparsely populated. It is obvious that a vast population can be brought into the country without the slightest encroachments upon the rights of the Arab peasant." Such, somewhat condensed, is the statement made by Dr. Weizmann, chairman of the Zionist Commission sent out under the auspices of the British government. Contrasted with the dreams of many believers in the "Return to Zion," it is very modest, but it represents a program which is perfectly possible to execute, and, what is at present much more to the point, it represents what the practical Briton believes to be the utmost which can be conceded in view of the promises made to the Arab kingdom.

For Husein, Sultan of the Hejaz, is no small force to be reckoned with. When Faisal, his son, entered Damascus, he "announced that he made no distinction between members of the Arab nation, of whatever creed or religion. I shall never betray the Arabs, and I trust that the Arabic language will attain the position that it deserves. It is the suffering of the Syrian nation and the atrocities which they have suffered from the Turks which have brought about this day." "The sword of the Arabs could not be sheathed until the other regions held by the Turks were freed," and he pointedly included Aleppo, far to the north in Syria, in the "Arabian country." All Syria might be claimed on this basis.

Yet when he arrived in London, he could declare "The two main branches of the Semitic family, Arabs and Jews, understand one another, and I hope that, as a result of interchange of ideas at the Peace Conference, which will be guided by ideals of self-determination and nationality, each nation will make definite progress towards the realization of its aspirations. Arabs are not jealous of Zionist Jews, and intend to give them fair play, and the Zionist Jews have assured the Nationalist Arabs of their intention to see that they, too, have fair play in their respective areas. Turkish intrigue in Palestine has raised jealousy between the Jewish colonists and the local peasants, but the mutual understanding of the aims of Arabs and Jews will at once clear away the last trace of this former bitterness, which, indeed, had already

practically disappeared even before the war by the work of the Arab secret Revolutionary Committee, which, in Syria and elsewhere, laid the foundation of the Arab military successes of the past two years." To the practiced ear, there is a marked difference between the two speeches. In the intervening time, Mecca as well as Jerusalem had heard from London.

Whatever the immediate decision as to the territories controlled by the Hejaz Sultan, his spiritual position is a portent for the future. The present Sultan still calls himself the Caliph, the "Successor of the Prophet," but he is now completely discredited. Historically, his title was of more than doubtful legality, and he was accepted only because Turkey was the one important Muslim power. Muslim publicists have of late challenged his title anew and the strong protest of the Meccan Ulema, perhaps the most respected body of theologians and jurists in the Muslim world, closes with the sinister request that their opponents consider this question: "What is the Caliphate and what are its conditions? . . . . As to the question of the Caliphate, in spite of all that is known of the deplorable condition in which it is situated at the present moment, we have not interfered with it at all, and it will remain as it is *pending the decision of the whole Muslim world.*" The significance of the last few words cannot well be exaggerated.

Meanwhile, the Sultan of the Hejaz is the most observed of all Muslims. Thus far, his actions have been such as to secure the respect and admiration of all who fight for freedom. For the first time in centuries, the annual pilgrimage to Mecca has been conducted without robbery and slaughter on the road. Mecca has at last something like modern sanitation, and travellers need no longer hasten to reach rail head before the coming of the pilgrim caravan and the concomitant cholera. Public schools, public works, a newspaper, the use of foreign and Christian agencies, even to the Red Cross, all are to be noted.

In the last analysis, it is still the Golden Rule which measures a man and a religion. We all know how "Christian" Germany was responsible for the murder or deportation of millions of unfortunate Armenians. On the borders of the desert east of Palestine, Faisul, son and general of the Hejaz Sultan, found some of the unfortunates the Young Turk had left to perish. He freed them, aided them to the best of his ability, and sent out of the country such as wished. An Armenian Pasha in Egypt sent him this telegram: "Every Armenian throughout the world is today the Ally of the Arab movement." To similar words of

appreciation for this act, Sultan Husein replied: "Faisul, in assisting the oppressed, has only performed one of the first duties of our religion and of the Arab's faith. I say with confidence and pride that the Armenian race and other races in similar plight are regarded by us as partners in weal and woe. We ask God before everything to give us strength to enable us to do them helpful service by which to prove to the world the true feelings of Islam, whose watchword is freedom."

With such a confession of faith, we need not wonder that of the two hundred and fifty million Muslims of the world, a bare five per cent was ever on the side of our opponents, that nearly the entire remainder, before the breakdown of Russia, was definitely pledged to the cause of liberty, that many were fighting side by side with our boys in France. By their action in this war, as well as by the weight of their numbers and their unrivalled position at the very heart of the old world, they demand and will secure adequate treatment at the peace table.<sup>1</sup>

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<sup>1</sup>This article is a revision of one presented in the *Historical Outlook*, IX: 480 ff.

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XVI

DECEMBER 30, 1918

No. 18

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

## Territorial Problems of the Baltic Basin

BY

LAURENCE M. LARSON

Professor of History



PRICE TEN CENTS

PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA

## TERRITORIAL PROBLEMS OF THE BALTIC BASIN.

In these days we often think of seas, rivers, and other waterways as natural boundaries separating nations and peoples, and affording a certain security against attack and invasion. But in earlier centuries, in the age before strategic railways, this was not the prevailing belief. Three generations ago the seas were not regarded as barriers: they were connecting influences that served to bind states and regions together. The sea has always been important as the great highway of commerce, and it has also facilitated the exchange of beliefs and ideas. In the past, nations have therefore been peculiarly interested in the seas that washed their shores, and also in the other shores that were touched by the same waters.

In spite of changed conditions of travel and transport, the interest in waterways has persisted. Italy seems anxious to control both shores of the Adriatic; and England feels that she must control the entire circuit of the Irish Sea. No nation at present can hope to make the Baltic Sea its own; but such ambitions have been cherished in the past and at times almost realized. Four hundred years ago Denmark was the greatest power on the "Eastern Sea." In the seventeenth century Sweden developed an even more complete hegemony in those waters, but was forced to surrender it to the Russians early in the eighteenth century. In recent years Germany has dominated the Baltic, and for a year after the Russian collapse the shores and the shipping of the entire sea was at her mercy.

It should be noted that Sweden has all her sea coast on these inland waters, that Denmark and Prussia have a number of important ports on the Baltic, and that in 1914 Russia, too, had a long "window" looking out upon this same sea. Economically speaking, the Baltic region is to a great extent a unit. In the years before the outbreak of the Great War the exports of Russia were directed chiefly toward Germany, from which country she also drew more than half of her imports. The commerce of Sweden has always traveled chiefly eastward and southward, to Russia and to Germany. It is therefore quite natural that the peoples occupying the shores of this great waterway should be interested in every important change that appears in any other part of the basin.

There was great anxiety in Sweden when the Tsar began to mobilize, and the Danes trembled when the Kaiser drew the sword. But now there is chaos in Russia and turmoil in Germany. And out of

the confusion that prevails along the eastern and southern shores of the Baltic basin have arisen a series of intricate territorial problems, some of which appear to be almost incapable of satisfactory solutions.

### *North Sleswick*

English and American writers have recently referred to a problem of Sleswick-Holstein, to a Danish Alsace-Lorraine, the restoration of which is said to be stoutly demanded in Denmark. It happens, however, that there is no problem of Sleswick-Holstein, and the Danish Alsace-Lorraine is a much smaller area than is usually described by those who write on territorial peace problems. For a period of four hundred years the kings of Denmark were also counts or dukes of Holstein; but Holstein was never Danish either in race, language, or sentiment, and was never a part of the kingdom of Denmark.

Sleswick, on the other hand, at one time actually did belong to Denmark and it is a question whether it was not still a part of the kingdom, when the German powers seized the two duchies, Sleswick and Holstein, in 1864. There are Danes at present who wish to claim the greater part or even the whole of Sleswick on historic grounds, but this desire is not general. With the passing of time the southern part of the old duchy has become German in speech and sentiment, and the Danish people do not care to annex or even to reannex territory the population of which is of an alien nationality.

The case of North Sleswick is wholly different; this region has been Danish and Danish only for more than a thousand years. The same is true of parts of Mid Sleswick where both the German and the Danish nationality are strongly represented. The Danes were glad in 1864 to sever the old connection with Holstein; they yielded South Sleswick with great reluctance; but the separation from North Sleswick has ever since been a source of national grief.

The fact that Sleswick was not all German was recognized in the treaty of Prague (August 23, 1866), by which the emperor of Austria yielded his rights in the conquered duchies to the king of Prussia. This treaty stipulated that the inhabitants of "the northern districts of Sleswick" should be allowed to decide by referendum whether their country should continue a part of Prussia or be returned to Denmark. No such referendum has ever been allowed. In 1878 Austria released Prussia from this obligation; but the Danes of Sleswick insist that the pledge is still a binding one and that the right of decision belongs to them.

The problem of North Sleswick is, therefore, not whether a certain territory shall be restored to Denmark, but whether the inhabitants of that region shall be allowed to exercise the right of self-determination which was promised them more than fifty years ago.

Time and again the Danish members in the *Reichstag* have risen to demand a referendum with refusal as the invariable result. During the present war German opinion seems to have become more favorable to the cause of the inhabitants of North Sleswick, who for more than half a century have fought to maintain their nationality; but the policy of the government has been more repressive than ever before: it was a criminal act even to mention the Sleswick question in the public press. To discuss the matter at a public meeting was also forbidden.

But early in October, 1918, the citizens of North Sleswick were informed by their representative in Berlin that the Prussian regime was doomed and that the throne itself was tottering. A week later certain important steps were taken preparatory to another demand for a referendum. When the German government announced that it was willing to accept President Wilson's peace program, the Sleswick Danes felt that their day had arrived, and on October 23 the question of their future status was brought up in the Reichstag. The secretary for foreign affairs, Dr. Solf, denied vigorously that Denmark had any claim on any part of the old duchy, but privately he informed the Sleswick Danes that the government was disposed to grant their request.

A few days after the armistice had become a fact and Germany was still in the throes of the revolution, the Sleswick Danes took action to bring their case before the peace conference. The Electoral Union, the political organ of the Danish part of the population, at a meeting in Aabenraa (November 16) adopted a series of resolutions in which a referendum was demanded and certain conditions laid down of which the following are the most important:

(1) The southern boundary of North Sleswick is defined as a line beginning at a point a few miles north of Flensburg and drawn in a general westerly and slightly northwesterly direction across the peninsula. It is desired that the area north of this boundary shall vote as a unit.

(2) It is also demanded that such adjacent districts in Mid Sleswick as may wish to vote on the question of reannexation to Denmark shall be permitted to do so.

(3) All men and women of the age of twenty or above who are residents of the districts concerned (except Germans who have lived



less than ten years in the country) shall be allowed to participate in the referendum. Former residents who have been exiled by the Prussian authorities shall also be allowed to vote.

The Danish government has been requested to present the case of North Sleswick to the Allied powers and has consented to do so. It seems extremely probable that the peace conference will take favorable action. That North Sleswick will cast an overwhelming vote for reunion with Denmark is beyond question. The referendum, if held, will add at least 150,000 persons to the Danish population; if Mid Sleswick is also allowed to participate, the number may exceed 200,000. It was argued at the Aabenraa conference that the present anarchic conditions in Germany are likely to influence the voters of Mid Sleswick very strongly in the direction of a choice of allegiance to Denmark. But the conference was also agreed that "we must not demand more than what is really ours."

### *The Kiel Canal*

It has been urged by certain influential English editors and statesmen that not only the Danish-speaking part of Sleswick but the entire province of Sleswick-Holstein should be transferred to Denmark. The origin of this suggestion lies in an effort to find a satisfactory solution for the problem of the Kiel Canal. For there seems to be a strong feeling in certain quarters that Germany must be deprived of the control of this waterway.

The Kaiser Wilhelm Canal (usually called the Kiel Canal) begins at Brunsbüttel at the mouth of the Elbe River and terminates at Haltenau on the Baltic Sea, two or three miles north of Kiel. Brunsbüttel is in Holstein, while Haltenau is just within the boundary of Sleswick. For a distance of twenty miles or more (between Rendsborg and Haltenau) the canal runs very close to or along the border separating the two old duchies; for a short distance it cuts through what has always been Sleswick territory.

The annexation of the entire province would consequently place the Danes in possession of the entire canal. The annexation of Sleswick alone might, perhaps, be sufficient, as it would make the canal an international waterway. Such an arrangement would leave the Germans in possession of the greater part of it, but the Danes would control the Baltic terminal, and they would also share to some extent in the control of the traffic on the canal because of its character as a waterway on the boundary. Shortly after the armistice had been proclaimed a writer

in the London *Times* suggested that the real problem in Sleswick is not North but South Sleswick. Though he realized that objections would be raised to the plan, he argued that the necessities of the situation demand that Denmark should assert her right to all of ancient Sleswick. South Sleswick might be given a large measure of political and cultural autonomy, but it should become an integral part of the Danish kingdom. The writer added that the annexation of the whole of Sleswick would give Denmark a strategic boundary, of which that country seems to be in real need.

There are, however, several excellent reasons why such a transfer of territory should not be made, any one of which should be sufficient to defeat the project.

(1) It violates the principle of nationalism: what is Danish should be Danish; what is German must be permitted to remain German. A lasting peace cannot be built on the disregard of this principle. If South Sleswick should declare her willingness to renew the old allegiance, that would be another matter; but such a decision is quite unlikely.

(2) The Danes do not desire to renew the old relationship with Holstein. From its very beginning this connection was a source of trouble and even of danger. The revolt of 1848 and the calamities of 1864 can be traced directly to the plottings of the intellectuals and the junkers of Holstein and German Sleswick. But complete annexation, such as is suggested at present, would be far more dangerous to Denmark than was the old personal union, for it would mean the addition of a German element numbering nearly 1,500,000 to a Danish population counting a little more than 2,700,000. It is quite clear that Denmark could not accept a gift of this sort without endangering the peace of the kingdom and the future of the Danish nationality.

(3) The Danes have scarcely sufficient military strength to be entrusted with the guardianship of so important a waterway as the Kiel Canal. It has been argued that in time of war it could easily be destroyed, if the Danes should find themselves unable to hold it. The Kiel Canal was, indeed, built for military purposes chiefly; but it is also of great commercial value, and it is to the interest of the world that it be kept intact. In the past it has been used mainly by German ships, but it has also been utilized to some extent by those of other nations.

(4) It is not possible to find a strategic boundary for Denmark that would be of any particular value. Perhaps the most satisfactory would be the old "Danework" line between the Sley inlet and the Trene River; but this would leave the Kiel Canal wholly within German

territory. It should be noted that Denmark is broken up into fragments, all of which can be readily isolated. Real strategic boundaries are therefore impossible in this case.

If the Kiel Canal is to be taken away from the Germans, some form of international control will have to be devised. This is by no means an ideal arrangement, but it seems likely that the peace conference will find many other problems, especially where waterways are in question, that will admit of no other solution.

### *Finland*

By the treaty of Brest-Litovsk (signed March 3, 1918) the Bolshevik government formally surrendered a broad strip of territory lying along the western frontier of the Russian empire from the Arctic regions to the Sea of Azov. In parts of this great area nationalistic movements had been in active progress for some months or years; in others the demand for separation from Russia appears to have been artificially created to promote the plans of the Pan-Germanists.

When the armistice was agreed upon last November, one of the conditions laid down by the Allies was that the German government should repudiate the treaty of Brest-Litovsk. Technically, therefore, Russia may be said to have recovered her territorial rights in the west and southwest, except in the case of Finland, the independence of which was recognized by the Bolsheviks at Brest-Litovsk early in March, 1918. But the facts and conditions are not what they were in the earlier months of 1918; governments have been set up in the various units surrendered at Brest-Litovsk, five or six in all; and some of these are likely to receive recognition at the peace conference.

Among those that will probably survive is the new state of Finland. From 1808 to 1917 the Finns were counted among the subjects of the Russian Tsar. Constitutionally Finland was an independent grand duchy united with Russia in the person of the emperor; practically this meant merely that the grand duchy occupied a privileged position among the many dominions of the Tsar. During the last twenty-five years of the union the Russians were actively seeking to obliterate all traces of Finnish independence and to "Russify" the country. This led to determined opposition on the part of the Finns, and when the Great War broke out the young men of Finland left their homes in large numbers, stole across the Baltic to Sweden, and ultimately found their way into the German army.

When tsardom collapsed, early in 1917, the Finns seized the opportunity to assert their independence. They contended that the union

with Russia was wholly personal and that when the imperial office was abolished, all connection with the Russian government automatically terminated. After a period of civil war between the Bolshevik elements and the more conservative classes, the middle class groups with the assistance of German forces were able to organize a government of the conservative type and with leanings toward Germany. A monarchical form of government was agreed upon and the crown was offered to a Hessian prince, a brother-in-law of the Kaiser. Then came the German collapse with serious results for the plans of the Finnish monarchists. A change in government became inevitable and the country is at present administered by a senate counting seven monarchists and six republicans. It is significant that the new regent, General Mannerheim, telegraphed his acceptance of the office from London.

Thus far the French government alone of the Allies has recognized the new state. A vigorous propaganda has been carried on to prevent further recognition and to induce France to rescind her action; but this is not likely to be successful. The probabilities favor the general recognition of an independent Finland at a reasonably early date.

The Finnish problem at the peace conference is chiefly one of boundaries. Finland as a political unit is a product of Swedish imperialism. The Swedes began their career of conquest east of the Baltic in the twelfth century, and they held the grand duchy continually to the earlier years of the nineteenth century. But they never came into control of all the regions inhabited by Finns: east of their borders lived a considerable number of that race (Karelians) who had accepted Russian rule and civilization and were adherents of the Greek Orthodox church.

During the past year the government at Helsingfors has asked that all eastern Karelia be transferred to Finland, and that the limits of that country be extended eastward to Lake Onega and northward to the Arctic Ocean. This suggestion naturally found no favor at Moscow. The Bolsheviki, in whom the passions of national feeling and patriotism are not strong, might conceivably be induced to surrender the territories between Finland and the great lakes; but the great peninsula north of the White Sea they will scarcely be willing to yield. The Murman (Norman) coast and Kola peninsula are almost without economic value and resources; they comprise a vast frozen area almost uninhabited except for a few nomadic Lapps and roving Karelians. But the Murman coast has an ice-free harbor, and Russia has lost more ports than she can afford to lose.

About sixty miles east of the Norwegian frontier on Kola Bay lies Alexandrowsk (Catherine Harbor) where ships may enter and leave at almost any time of the year. In 1915 the serious military situation (the Baltic and the Black Sea were both closed by the enemy) forced Russia to carry out an old plan which called for a railway from Petrograd to Catherine Harbor. If the claims of the Finnish state are allowed, Russia will lose Catherine Harbor and about one hundred and fifty miles of the Murman railway. She will have but one remaining port on the Arctic: Archangel, which is ice-bound nine months of the year.

The conflict between Helsingfors and Moscow thus involves two separate problems: eastern Karelia and the Murman coast. The Karelians outside Finland number about 350,000; most of them live between the Finnish boundary and the Murman railway. In this case the principle of nationalism may perhaps come into collision with the principle of self-determination. Being of the same racial stock as the western Karelians, they ought, it would seem, to take gladly to the suggestion that their country be joined to Finland. But if they are allowed to decide by referendum it is not at all sure that they will vote to separate from Russia. The civilization of Finland is Swedish and the religion is of the Lutheran type; while in eastern Karelia the faith and the civilization of Russia have ruled the minds for at least six centuries.

The problem of the Murman coast is essentially economic. It means that the Finns are determined to secure an outlet on the Arctic, which they have never had. As long as Finland promised to remain under German influence, the neighboring states of Norway and Sweden were reluctant to see Finland extend her territories to the frozen sea; but as the situation is at present they are not likely to interpose any objections, provided that their own territories be left intact.

### *The Aland Islands*

Finland has long been a land of strife. Recently it was the bourgeoisie against the Bolsheviki; earlier it was the Finn contending against the Russian; still earlier it was Turanian Finn against Swedish Finlander. The Swedish element in Finland is not great numerically: about 400,000 in a population of about 3,250,000. But it controls to a large extent the wealth of the country; in earlier days the Swedes were the ruling class, and even at the present day their political influence is far out of proportion to their numbers.

The Swedes probably entered Finland by way of the Aland archipelago. The Alands are a group of rocks and small islands lying across the entrance to the Gulf of Bothnia; only one (Aland) is of any appreciable size. They approach to within twenty miles of the Swedish coast and form a natural series of stepping stones to the Finnish mainland. Geographically they may be regarded as fragments of the Finnish land mass; but they have been inhabited by Swedes as long as their history can be traced. There is at present a strong, almost unanimous sentiment on the islands in favor of a reunion with Sweden.

The material value of the Aland Islands is very slight. The inhabitants (about 15,000 in number) are chiefly farmers, sailors, and fisherfolk, subsisting on what they can wrest from a thin soil or gather from the waters about them. The importance of the islands in European diplomacy is due to their strategic position with reference to the capitals of Sweden, Finland, and Russia. The harbor facilities are good and the islands possess real possibilities as a military stronghold. The Russians soon came to see the advantage of a naval station at Aland and erected fortifications at Bomarsund, which were destroyed by the English and the French in the Crimean War. On the request of Sweden, Russia agreed not to rebuild the fortifications, and Aland remained unfortified until some time after the outbreak of the Great War.

As Stockholm is only seventy-five miles distant, any plan to build a naval establishment on the Alands is sure to produce uneasiness in Sweden. For similar reasons Finland and Russia are anxious that the archipelago shall not fall into the hands of the Swedes. Soon after the outbreak of the Finnish revolution a Swedish force landed on the islands ostensibly to maintain order; but they were soon displaced by German garrisons. At Brest-Litovsk it was agreed that the islands should belong to Finland, but also that they should never be fortified and that the shipping conditions in the waters about them should be regulated by a special agreement among the nations most interested: Germany, Sweden, Finland, and Russia.

The efforts of Sweden to gain control of the archipelago and the evident desire of the inhabitants to be reunited with the mother country has caused much uneasiness and resentment among the Finns. The feeling that the Alands must remain a part of Finland is shared by the Swedish Finlanders as well as by the Turanian Finns. The former have organized a separate political party the object of which is to secure Swedish nationalism in Finland and they call loudly to their brethren

on the islands not to desert them but to remain with them and help them in the struggle that is sure to come.

The program recently published by the Swedish party in Finland does not promise a wholly peaceful development in the new state. It calls for equal rights for the two languages, Swedish and Finnish, and for equal opportunities for each in the schools of the land. It also calls for the creation of new administrative areas in order that the regions occupied by Swedish Finlanders may be formed into compact territorial units. For these units an extensive autonomy is demanded and it is also suggested that the Swedish churches should be grouped into a separate diocese. The Swedes also demand what virtually amounts to a distinct organization for their part of the army and the navy. But these demands (some of them, at least) are sure to meet strenuous opposition from the Turanian Finns.

The problem of the Aland Islands, though in large part a military consideration, is involved in the nationalistic conflict between Swedes and Finns. The Swedish Finlanders cannot afford to weaken their strength by surrendering the islands to Sweden. The Finns on their side are anxious to prevent the Swedish boundary from approaching the Finnish mainland.

#### *The Esthonians and the Letts*

South of the Gulf of Finland lie the Baltic Provinces, a broad strip of coast land extending to the frontiers of Prussia. There are three provinces in this group: Esthonia, Livonia, and Courland. Their combined area is about 36,000 square miles, and they have a total population of approximately 3,000,000. There is scarcely any other region in Europe that offers more serious problems than this strip of coast on the east side of the Baltic.

All the great states in the Baltic basin have at some time or other held possessions on the eastern shore. In the thirteenth century the greater part of the Provinces was held by the Danes. Later in the same century came the Teutonic Knights, a crusading order that was looking for a new field for their military and religious activities. During the sixteenth and the seventeenth century the Swedes came into possession of Esthonia and Livonia, while Courland (1561) was united to Poland. Ultimately the whole region was annexed to Russia. Excepting the Danes, whose occupation was for a brief period only, these conquering peoples have left deep traces on the history, the intellectual life, and the civilization of these three little states.

The earliest known inhabitants of this region were the Letts, an ancient people closely related to the Lithuanian stock. The Letts and the Lithuanians must have come into this part of Europe long before the arrival of either the German or the Slav; their language is very ancient: it is said that "almost any Lithuanian peasant can understand simple phrases in Sanskrit" (the language of ancient India).

Soon after the beginning of the Christian era the Finns entered the country from central Russia. The Letts and the Finns are still the dominant races in the Baltic Provinces. The Letts occupy the country from the Gulf of Riga eastward: Courland and the southern half of Livonia. The Finns (Esthonians) inhabit the remainder of the Provinces: Esthonia and the northern half of Livonia. There is no longer a Livonian people.

Scattered throughout the three Provinces are small groups of other peoples, Germans, Slavs, Swedes, Jews and mixed races. Of these the German element is the most important and also the most ancient, dating, as it does, from the time when the Teutonic Knights controlled the land. Until quite recently the German nobility was the land-owning class in the rural districts; the German merchants controlled the trade in the cities; German scholars manned the institutions of higher learning; and German clergymen of the Lutheran faith directed the affairs of the church and the primary schools. The Germans comprised only from five to ten per cent of the total population; but their importance in the public life of the Letts and the Esthonians was very great.

In the treaty of Brest-Litovsk Lenine and his associates were compelled to surrender the Baltic shore-land. It is not known just what the Prussians intended to do with the Provinces, but it is clear that they planned to organize them in such a way as to bring them into some sort of a vassal relationship to the German empire. The Prussian expansionists realized that it would be unwise to add extensive alien elements to the German citizenship; but they believed it possible to annex the Baltic lands (with other neighboring regions) to the economic system of the Fatherland without seeming to impair their national rights. The extension of the German strategic railway system from the east Prussian border to the Gulf of Finland, perhaps even to some port on the Arctic, and the admission of the Baltic states to the projected Mid-European tariff union would give the commercial interests of Germany an unassailable position on the east coast of the Baltic Sea.

Economic dependence naturally carries with it a certain measure of



political vassalage. Military alliances and the election of German princes to Baltic thrones were also important items in the Pan-German program. During the summer of 1918 several princelings from the lesser German states held themselves in readiness to accept crowns or coronets in the conquered lands. It was reported at one time that the Kaiser thought seriously of assuming the title duke of Courland.

At the conclusion of the recent armistice it was stipulated that the Germans should withdraw the forces that were still being kept in regions formerly belonging to Russia. When this became known the inhabitants of the Provinces began to look forward to national independence. There was already a working governmental organization among the Esthonians, and late in November the Letts proclaimed a republic in Riga to be known as Lettland. It was announced that it was to be a state primarily for native Letts and that no German Balts were to be admitted to office in the ministry. At the same time one Karl Kullmann (or Ullmann) was appointed prime minister; if his name is an indication, the new regent of Lettland is surely not innocent of Teutonic ancestry.

When the German forces began to retire, the Letts and the Esthonians suddenly found themselves facing a new danger from the east. On the heels of the retreating Teutons came the hosts of the Bolsheviki, who had seized the opportunity to begin a vigorous campaign of reconquest. In the neighborhood of Narva the Red army met a decisive defeat, however, and the invasion seems, at this writing, to have been checked, though perhaps only temporarily. The Finns apparently came to the assistance of their Esthonian kinsmen and the Swedes appear to have shown some interest in the cause of the Letts. But the situation remains very precarious: the Russian forces are evidently undisciplined and inefficient; but they are strong in numbers and it is doubtful whether the Baltic levies can defeat another offensive.

The future of this region is therefore extremely uncertain. There are no indications as to how the controlling minds at the peace conference regard the problems of the old Russian frontier; consequently, all that can be done at present is to indicate a few of the more probable solutions.

(1) The Provinces may be restored to Russia. There seems to be a Bolshevik element in the Baltic lands which naturally favors some sort of a reunion with the great neighbor to the east. In the earlier days of the Lenine regime, the "people's commissioners" depended largely on the military services of the "Lettish guard," a force of Lettish soldiers

with strong revolutionary tendencies. But this element is probably not a numerous one, as the population of the Provinces is chiefly agricultural, and the problem of the land has been to some extent solved by the extension of a system of peasant proprietorship.

There is, indeed, something to be said for reunion with Russia. The war has left Russia in great need of commercial outlets. The best ports on the Black Sea have been seized by the Ukrainians; and in the Baltic region a single port remains: Petrograd, which is ice-bound for several months of the year. Practically the only ice-free port remaining within the borders of Russia is Catherine Harbor on the Arctic coast. The Bolshevik mind may be deficient in patriotism but it no doubt understands the importance of commercial outlets and the economic value of ice-free ports. In the Baltic Provinces there are at least six fair harbors, all of which have a longer period of navigation than Petrograd. Of these the best known is Riga, though it is less important than Libau, which is open for navigation every month in the year.

It is quite evident that Russia needs the Baltic ports, but it is also clear that these ports are in real need of Russia. Their prosperity has in large measure been built up on the commerce of the vast plain to the east and if means should be found to divert this trade to another series of ports, there would be economic distress along the whole shore from Libau to Narva.

(2) They may be allowed to organize themselves into two independent states (as appears to be their desire), in which case the common boundary would probably be the Salis River, a small stream that approximately separates the Esthonian settlements from those of the Letts. It is a grave question whether these two peoples have sufficient strength and resources to maintain a self-respecting existence. At the highest the population of the proposed Lettland will not exceed 2,000,000, while that of Esthonia will be less than 1,000,000. It would seem that such an arrangement must mean serious difficulties in the future.

(3) Esthonia may decide to join Finland. Recent years have seen the development of a strong national feeling among the Esthonians, but being, after all, a branch of the Finnish race, they ought to be able to live in reasonable happiness with their brothers in a greater Finland. If the Finns are permitted to annex Karelia to the east and Esthonia to the south, their country will have a population of approximately 5,000,000.

(4) The Letts may be asked to join forces with their Lithuanian kinsmen in a revived Lithuanian state. Six hundred years ago Lithuania had a period of greatness, her area covering an extensive region east of Poland between the Baltic and the Black Sea. Since then a considerable part of the Lithuanian race has been absorbed into the Slavic mass; there have also been strong currents of emigration from the Lithuanian territories to Siberia and to other parts of Russia and even to lands across the Atlantic. At present the Lithuanian population in its native territories numbers less than 3,500,000.

The Lithuanian area is not extensive, perhaps not more than 30,000 square miles. The future of this region has not been much discussed; the organization of a Lithuanian state has been urged and is within the realm of the possible; but it is not a promising solution, especially if the Letts should insist on establishing a separate state.

For several centuries the Lithuanians and in part also the Letts were subjects of the king of Poland. It is possible that they might be induced to renew this historic relationship, though it is doubtful, since racially Poles and Lithuanians have nothing in common. They will, however, have common rivals and perhaps enemies to the east and the west, and such a union may in time be forced by circumstances, as it was forced in the middle ages. An arrangement of this sort would add considerably to the strength of Poland, and, what is more important, it would give the Poles a satisfactory commercial outlet on the Baltic.

### *Danzig*

As a result of the Great War and the consequent readjustment of frontiers, several important European states are likely to find themselves deprived of direct access to the sea. These are German Austria, Hungary, Bohemia (the republic of the Czechs and Slovaks), and Poland. In the case of German Austria this condition may be remedied by the admission of the Austrian territories to the new German republic; but for Bohemia and Hungary the only solution of this difficulty appears to be an economic arrangement with some neighboring state.

It is possible, as suggested above, that Poland may be able to reach the sea through the lands of the Letts and the Lithuanians. The Poles hope, however, to secure a shorter and more direct route by way of the Vistula. Libau and Riga are, indeed, desirable ports; but from the Polish viewpoint Danzig at the mouth of the Vistula is the natural outlet.

The Poles insist that the Vistula is a Polish river and should therefore

be under their control throughout its entire course. It is true that both banks of this river have a Polish population to a point some distance below Thorn or about one hundred miles from its mouth. Along the lower course between Thorn and the Baltic, the Polish population occupies a narrow tongue of land from twenty to fifty miles wide lying along the west bank of the river, while the opposite bank is occupied almost exclusively by Germans. The Poles insist that this strip of territory is not only essentially Polish, but is also necessary to their economic life and to the successful defense of their country; they demand, therefore, that it be included in the revived Polish state.

This area was for several centuries a part of the Polish kingdom but was taken by the Prussians in the partitions of Poland in the eighteenth century. To return what territory is still Polish in speech and sentiment, seems, therefore, a matter of justice merely. There are, however, certain facts and conditions that must be taken seriously into account before the left bank of the Vistula is definitely handed over to the Polish state.

(1) The tongue of land in question lies wholly within the territory of Prussia; if it is annexed to Poland that part of Germany east of the Vistula will be separated completely from the rest of the Fatherland. It is inconceivable that the Germans will remain satisfied with this condition. The Poles are consequently likely to find that the possession of this strip is a danger as well as an advantage. In case of war with Germany it could not be successfully defended.

(2) The territory, while largely Polish in population, is not exclusively so; it has a strong German minority which in certain sections is almost as strong as the Slavic majority. This is particularly true of the cities where the Germans are, in places, even the more numerous element.

(3) The region would lose much of its economic value to Poland unless Danzig were included. But Danzig is essentially a German city, nine-tenths of the population being German in race and speech. Through most of its history Danzig has been German rather than Polish; though for a long time it was counted as a part of the Polish kingdom, its relationship to that state was almost wholly nominal, as it enjoyed privileges which made it practically a self-governing republic.

At the same time it must be remembered that the prosperity of Danzig is based largely on the great trade that flows toward it from the valley of the Vistula. And it must not be forgotten that the disposal of the tongue of land between Thorn and Danzig involves the political fate of more than 500,000 Poles.

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XVI

JANUARY 20, 1919

No. 21

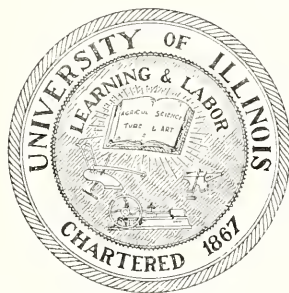
Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section, 1103 Act of October 3, 1917, authorized July 31, 1918.]

## The Republic of Ukraine

BY

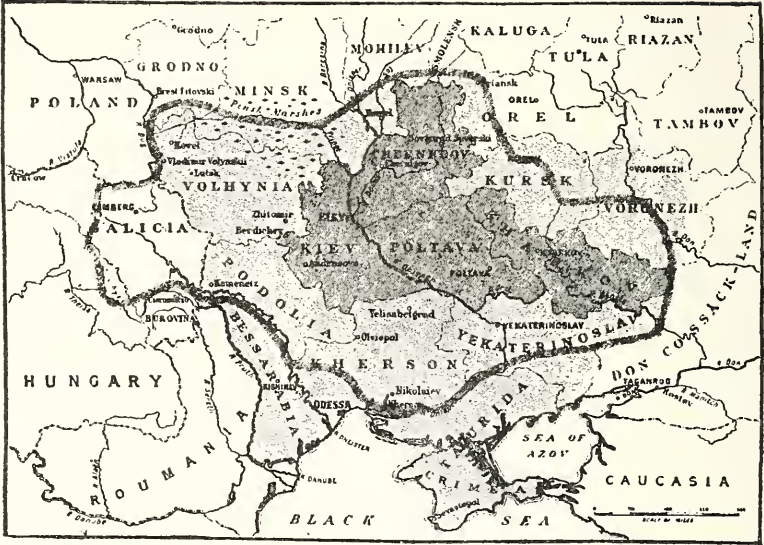
SIMON LITMAN

Assistant Professor of Economics



Price 10 cents

PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA



UKRAINIA

KEY TO MAP—The heavily shaded area is the original Little Russia. The lightly shaded area shows the territory which is now Ukrainia as claimed by the Ukrainian national assembly or the Rada. The territory where Ukrainians predominate is enclosed in the heavy belt.

## THE REPUBLIC OF UKRAINE

The newly formed Republic of Ukraine stretches from the shores of the Black Sea and the Sea of Asov northward into the heart of what was formerly European Russia. Within her somewhat loosely defined borders are included the former Russian governments of Volhynia, Podolia, Kiev, Kherson, Tchernigov, Poltava, Kharkov, and Ekaterinoslav covering an area of about 150,000 square miles and having a population of approximately 35,000,000 souls. It is thus composed not only of Little Russia (Ukraine proper) but also of Southern Russia, the new realignment having placed under the control of the Ukrainian government the northern part of the Black Sea littoral with its rich hinterland and with its important harbors of Odessa and Nicolayev. On the other hand Eastern Galicia and Northwestern Bukowina, which were at one time parts of Ukraine, are not included in the present Ukrainian Republic. The greater proportion of the inhabitants of this new political unit are Ukrainians, better known as Little Russians. They are a branch of the Russian Slavs although some recent leaders of the separatist movement working from and with the aid of the Imperial governments of Germany and Austria-Hungary have been trying to prove that there was nothing in common between the Ukrainians and their northern neighbors—the Great Russians. The seeds of discord which the workers for the dismemberment of Russia have been sowing found a fruitful soil in Ukraine because of the policy pursued by the old Czarist government of ruthlessly repressing every manifestation of national individuality.

Ukraine means borderland and borderland this country has been through many centuries of its turbulent existence; borderland between the frivolous aristocracy of republican Poland and the autocratically ruled, communistically inclined Muscovites; borderland between the nomadic tribes sweeping from the plateaus of Central Asia and the sedentary populations of the Mediterranean regions. Over its large stretches of gently undulating steppes swept one after another the Huns and the Avars, the Khazars and the Pechenegs, the Kalmucks and the Tatars. Living on a frontier, constantly fighting, pillaging and in turn being pillaged, attracting to themselves all the lawless and all the liberty loving elements of the adjoining lands, the Ukrainians have developed certain qualities of mind and heart which distinguish them from their kinsmen, the Great Russians and the White Russians. As

warriors they have evolved in Zaporogia, which was the soul of the old Ukraine, a peculiar military organization of Cossacks. The Cossacks were ruled by a "Hetman" elected each year from the ranks of the people and responsible to a general assembly, called the Rada.

The early history of Russia is closely linked with that of Ukraine; there, in the ninth century, on the banks of the river Dnieper, arose the first important Russian principality, that of Kiev. It was from Kiev that the Scandinavian princes who ruled over the Russian Slavs made their expeditions against Byzantium and it was through Kiev that the Byzantine influences gradually penetrated northward and westward into Russia, making themselves felt in Vladimir and in Smolensk, in Novgorod and in Moscow. Prince Vladimir of Kiev accepted the Greek form of Christianity in 988 and after that for about two centuries Kiev, "the mother of Russian towns," played the leading role in the political and cultural life of the Russian Slavs. The Kievite Russia became a victim of internal dissensions; it disintegrated even before Ghenghiz Khan with his Mongolian hordes in the thirteenth century swept over the country, filling it with terror and devastation, and exacting tribute from all.

Submerged for over two centuries and a half beneath the flood of the Tatar invasion the Ukrainians were too weak in the fifteenth century to withstand the encroachments of the Polish-Lithuanian State; they were conquered, but not subdued. Frequent bloody uprisings took place in which the ruthless and fiendish brutality of the Ukrainians was matched by the refined cruelty of the Poles. It was in 1653, when one of the most ambitious attempts to regain freedom had failed, that the Ukrainians offered their allegiance to Czar Alexei Mikhailovich. The cautious Muscovite Government at that time showed little inclination to make common cause with the unruly Cossacks. However, after lengthy negotiations the eastern part of Ukraine came under the suzerainty of Russia. For over one hundred years the Cossacks continued to enjoy autonomy, this being destroyed by Catherine II in 1775. The second partition of Poland brought under Russian control the rest of the Ukrainian lands, those west of the river Dnieper, with the exception of eastern Galicia and northwestern Bukowina, where there dwell at present about 4,000,000 Little Russians known under the name of Ruthenians.

Since the second half of the eighteenth century Ukraine ceased to be the land of wild freedom and of stormy strength. The Syetch, the chief military post of the Dnieper Cossacks, disappeared, and with



it went the restless spirit of adventure, of rebellion, of continuous offensive and defensive warfare. Ukraine became an integral part of the Russian Empire which established itself firmly over the vast territory of southeastern Europe, for many centuries the battleground of tribes, races, and nationalities. Peaceful communities, peaceful because of the iron hand from Petrograd, spread gradually over the beautiful land of Little Russia with its broad navigable rivers, its rich black soil, its huge deposits of metallic and non-metallic minerals. The sword and the musket gave way to the plow and the scythe. As cultivators of the soil, the Ukrainians, to whom were added many other ethnical groups of the Russian population, spread southward into Taurida and eastward into the region of the Don. They transformed the plains and the hillsides into fields of wheat, rye, and corn, of sugar beets and tobacco, into fruit orchards and vineyards; they dotted the country with farm sites, hamlets, and villages, where the only reminder of the old days of bloody strife and of military glory is the song of the *kobzar*. Some of the Little Russians achieved distinction in Russian literature, art, and sciences; some of them have become prominent in industrial and commercial pursuits; others have occupied responsible governmental positions under the old regime, but the majority of them are peasants and shepherds, having little inclination and aptitude for manufacturing and trade activities. Most of the cities of Ukraine as well as of Southern Russia owe their development and prosperity to the Great Russians, the Jews, and the foreigners.

The peasants of Little Russia do not lack natural intelligence; they love poetry and music, but they are poor and ignorant; they still use in many parts of the country the wasteful three field system of agriculture; they have no modern implements and machinery, and thus, notwithstanding the favorable climatic conditions and the fertile soil of their land, they do not get on an average more than ten bushels of wheat a year per acre. Occupying the "Black Earth Belt" of the old Russian Empire, they produced before the present war about 35 per cent of Russia's wheat and close to 80 per cent of her sugar beets and tobacco; they also raised about 40 per cent of Russia's live stock output.

In the Donetz basin of Little Russia are found large supplies of coal, iron, manganese, and limestone. This proximity of fuel, metals, and fluxes, coupled with heavy import duties on iron, attracted foreign capital and led to the establishment of important iron and steel works. In 1914, Ukraine produced over 70 per cent of the coal, 60 per cent of

the iron, and all the mercury of Russia. Ukraine possesses also important salt deposits, particularly in three districts—the Carpathian foothills, the Donetz plateau, and the Pontian-Caspian salt-lake and liman region. Scattered through the country are pottery clays, kaolin, slate, chalk, gypsum, and many other non-metallic minerals. Some gold, silver, lead, and copper are also found, but the output of these metals is comparatively small.

The most important cities of Ukraine are Kiev, Odessa, Kharkov, Ekaterinoslav, Nicolayev, and Kherson. Kiev is situated almost in the center of the basin of the Dnieper where the main stream after having gathered its upper confluent carries the concentrated traffic of all its tributary territory to the Black Sea. The University of Kiev ranks third among those of Russia. Odessa is the leading seaport of the Black Sea, and it is, next to Petrograd, the most European-like of all the towns of Russia. Both Odessa and Kharkov, the latter in an intermediary position between the Dnieper and the Don, are intellectual centers; they possess flourishing universities and many schools. Nicolayev is a naval station as well as a commercial harbor. Kherson, near the mouth of the Dnieper, although less important than Odessa or Nicolayev, is an active business town; it exports large quantities of wood, cereals, and hides.

The movement to free Ukraine from the despotic control of Russian autocracy began long before the present war. The renaissance of the Ukrainian language and literature started in the early part of the last century and under the stimulus given to it by the great poet Shevchenko as well as by many other writers it made considerable headway when Russian authorities took alarm and passed in 1876 a decree forbidding the publication of works in the Ukrainian language. Those who protested against this drastic measure were thrown into prison or sent into exile. The result of the decree was the driving of the Ukrainian movement into Eastern Galicia, where it was welcomed by the Austrian government partially as a weapon to be used against the Austrian Poles, partially as a means for eventually disrupting the unity and the power of the Russian Empire.

After the revolution of 1905, the use of the Ukrainian language was once more permitted in Russia, but this concession did not satisfy the Ukrainians; it did not satisfy the Ukrainian masses whom the revolutionary aftermath left with a feeling of bitter disappointment; they had won a shadow of representation at Petrograd, but they had not suc-

ceeded in throwing off the yoke of petty officialdom, the heavy burden of taxation, the poverty and the squalor of their every day existence; neither did this concession satisfy a coterie of Ukrainian literary men who aspired towards nothing less than a complete emancipation of their native land from what they termed foreign domination. When Czarism fell, a number of the latter constituted themselves into a Rada or Council and presented demands to the Provisional government for the recognition of Ukraine as a separate administrative unit. In vain did Kerensky's government point out to them the needlessness and the dangers of their action at a time when strong enemy armies were fighting their way into Russia and when the Revolutionary government was doing its best to solve the many perplexing problems left by the old regime. The Rada insisted that the principle of self-determination of peoples proclaimed by the Revolution applied to the Ukrainians not less than to the Poles, to the Finns, or to the Letts. "Ukrainia for the Ukrainians" became the watch-word of a number of politicians many of whom had just arrived from Vienna or from Lemberg; with this watch-word they stirred up the slumbering nationalistic feelings in a part of the Ukrainian peasantry bringing it to the support of the separatist movement. Taking advantage of the weakness of the Provisional government the Rada issued on June 26, 1917, a Manifesto announcing that the Ukrainian people would henceforth manage their own affairs. The Provisional government had to give way; it recognized the General Secretariat of Ukraine as the highest administrative power of Southern Russia; the future constitution of the country was left to the decision of the Constituent Assembly which was expected soon to convene.

With the overthrow of the Provisional government by the Bolsheviki, the conflict between the North and the South of Russia became most bitter and intense; its character, however, changed materially. The Bolsheviki cared little for the integrity of Russia as a unified state; what they wanted was the spreading of the doctrine of social revolution into Ukraine; they were opposed to the Rada not because of its insistence upon Ukrainian autonomy but because it was, according to them, bourgeois and counter-revolutionary in character.

Threatened by the Bolsheviki on the one side and by the Russian nationalists on the other, the Ukrainian Council decided that it had nothing to gain and perhaps everything to lose by delaying radical action; and accordingly, on November 20, 1917, it proclaimed the establishment of the Ukrainian People's Republic. In a manifesto

issued at that time the Rada stated that it took this step in order to spare the country the horrors of a civil strife; it disclaimed any desire to bring about the disintegration of Russia, the establishment of the Ukrainian Republic being, according to the statement, merely a stepping stone towards the formation of a federation of free and equal peoples of Russia.

On February 9, 1918, the Ukrainian Republic, whose representatives sat at Brest-Litovsk, alongside the delegates of the Bolshevik government, concluded a separate peace with the Central Powers. It is impossible at the present time to state with any degree of certainty whether the ease with which peace was negotiated can be attributed to the fact that many leaders of the Rada belonged to the secret Austrian *Bund* and were supported by German money. Whatever the case may be, the fact remains that Ukraine was the first country to withdraw from the war and to give to the Central Powers a decided temporary advantage in the gigantic struggle.

Great Russia and Little Russia are mutually complementary geographic and economic regions; for over a century and a half the life of these two parts of the Russian Empire has been linked together, the Russian language having become the language of trade, of literature, of official and social intercourse between the various nationalities dwelling in the southern provinces of the country. Many parts of the present Ukrainian Republic never belonged to Ukraine and the people inhabiting these parts have not expressed the desire of renouncing their Russian citizenship. They feel, and think, and hope in the terms of the great country stretching from the Arctic Ocean to the Black Sea and from the borders of Austria-Hungary and Germany to the shores of the Pacific.

The effect of the breaking away of Ukraine from Russia can be best compared with the effect which the separation of our own Southern Section would have produced upon the United States. Economically it is utterly undesirable and under a truly democratic regime in Russia it is unnecessary either politically, socially, or culturally. An independent Ukraine means the setting up of hundreds of miles of artificial boundaries within the confines of which national or quasi-national jealousies and animosities will solidify and grow, and will lead to the creation of many complicated problems which would not occur if Great Russia and Little Russia become parts of a Federated Republic united by a community of economic interests and by the ties of mutual understanding.

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XVI

MARCH 3, 1919

No. 27

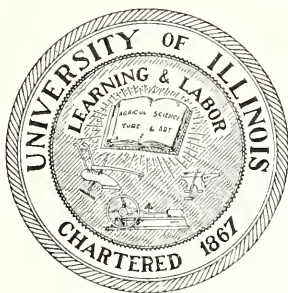
Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

## The Conflict of Parties in the Russian Revolution

BY

JACOB ZEITLIN

Assistant Professor of English



Price 10 cents

PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA

## THE CONFLICT OF PARTIES IN THE RUSSIAN REVOLUTION

The feelings of a person who from far away is watching the development of the Russian drama and who tries to keep his friendliness for its people undisturbed by partisan sympathies are likely to have but little constancy. The incidents are manifold and shifting. The information concerning them is incomplete and under the control of an interested censorship both at the transmitting and the receiving ends. The accounts by participants and witnesses are no more trustworthy on one side than on the other. There has been much scandalous lying against the Bo'sheviki and no little misrepresentation in their favor. Perhaps some of it has been deliberate and malicious; for the most part it arises from misunderstanding and from those bl'nd enthusiasms and antagonisms which such a struggle inevitably begets. But the distraction of people in this country who try to understand can be no greater than that of the Russians who are one day driven into the arms of the monarchists by the brutalities of the Bolsheviks and on the day following recoil toward the Bolsheviks from the atrocities of the monarchists. The present sketch makes no pretense of superhuman detachment, but in the survey of principles and actions here attempted, the aim has been to deal fairly with both parties to the controversy, to tell the truth as far as it can be construed from the published documents available to the writer.

From this survey a number of features emerge to serve as clues to the progress of events. (1) From the very beginning of the revolution all the real power was with the Workmen's and Soldiers' Councils and not with the ever-shifting provisional administrations. (2) The Workmen's and Soldiers' councils, in which originally the moderate socialists predominated, by degrees came under the complete control of the Bolsheviks. (3) The *coup d'état* which was effected through the dissolution by the Bolsheviks of the Constituent Assembly was only the inevitable step in the fulfilment of the revolution. (4) The Bolsheviks arrived at their power by unscrupulously resorting to every demagogic art and maintained themselves by every device known to arbitrary despotism, but made use of their power in a sincere attempt to carry out their promises, to give the people peace and bread, and to reconstruct society with a view to rendering justice to the exploited classes. (5) Many liberal and democratic elements continued to wage a struggle against the Bolsheviks but weakened their influence with the Russian people by making common cause with monarchist factions and calling in the military assistance of the Allies. (6) The developments

in the rival governments, where the power invariably passed from the hands of liberals to reactionaries and terminated in a military dictatorship, have served to reconcile Russians to the evils of Bolshevism and created a disposition on the part of former enemies to cooperate with the Bolshevik leaders. (7) The Bolsheviks, on their side, have been growing more conciliatory in their methods and have been more and more making those concessions to the views and prejudices of other parties which suggest a hope of arriving at a workable settlement. (8) Whether owing to the program of the Bolsheviks or to the other difficulties with which the country has had to contend, the economic condition of Russia is precarious and may result in the early downfall of the ruling party.

Three political parties have been prominent in the history of the revolution. The Constitutional Democrats (Cadets), who continue to be so called though they have changed their official title to the Party of Popular Freedom, represent the views of the liberal professional and mercantile classes and believe in a representative, parliamentary form of government such as exists in the United States or England. More important are the two great Socialist parties, Socialist Revolutionaries and Social Democrats. The primary distinction between them is that the former views the problems of social reconstruction from the standpoint of the peasant's interests, the latter from that of the workingman's. But the cleavage within these parties is of greater significance than the difference between the parties as a whole. They are both split up into moderate and radical factions, each having a tendency to coalesce with the corresponding group in the other party. The moderate and radical wings of the Socialist Revolutionaries are designated as Right and Left respectively. In the Social Democratic party the moderates are known as the Mensheviks and the extremists as Bolsheviks. The Bolsheviks became closely allied with the Left Socialist Revolutionaries, while their most determined opposition came from the Right Socialist Revolutionaries. The official name by which the Bolsheviks now prefer to call themselves is the Communists; it describes their ideal of government. At present the name of the Bolsheviks is closely linked in people's minds with the Soviets. The connection between them, however, is not a necessary one. The word *Soviet* means a *council* and was a title adopted by the organizations of workmen and soldiers formed at the beginning of the revolution without any reference to party distinctions. The Mensheviks at first formed a vastly preponderating majority in the Soviets, but as the Bolsheviks identified themselves more particularly with the interests of the workingmen and made

themselves spokesmen of a demand that all governmental power be transferred to the Soviets, their influence became dominant in those bodies and they became the agents for carrying the idea into practise.

### *The Provisional Government*

The weakness of the Provisional Government and the strength of the Soviets are complementary elements in the first six months of the revolution. When the abdication of the Czar was announced, the members of the Fourth Duma at once chose a ministry on the basis of the party alignment in that body. With equal promptness the workmen in Petrograd organized their Councils and elected their deputies to watch lest their revolution sustain a mischief at the hands of the Provisional Government. The reason for the mistrust was the unrepresentative character of the body which had chosen the ministers. The members of the Fourth Duma had been elected by a narrowly restricted class suffrage. The largest representation in it was enjoyed by the Octobrists and Centrists. "Both these parties," according to the statement of a conservative Russian, "had in their time been invented to create the semblance of a governmental majority in the Duma, and had no sort of roots in the land. The best evidence of this is that after the Revolution they did absolutely nothing to testify to their existence."<sup>1</sup> Next in size was the delegation of the Constitutional Democrats, while the various socialist parties formed a small minority. The first cabinet contained seven Constitutional Democrats, three Octobrists, and only one socialist. If the chief desire of the Russian people at this time had been an efficient prosecution of the war against Germany, doubtless the new ministry would have served well. Its members had given ample proof of their devoted patriotism, and they had sincerely at heart the greatness and prosperity of the Russian people. But among the people themselves a new impulse was stirring. Worn out by their unimaginable losses and privations, their economic life utterly demoralized, their military situation precarious, they had no immediate desire but for peace, and the Soviets made themselves the mouthpiece of their longing. While the Government was pledging itself to the war aims of the Allies, the Soviet was issuing an appeal not only to the Allies, but to the neutral countries as well, and even to the workmen of the enemy, for peace on the basis of no annexations, no indemnities, and the self-determination of peoples. The ministers were making sincere efforts to induce the Allies to restate their war aims in accord with these principles but were having no success. The people

1. A. Bublikov: *The Russian Revolution*, New York, 1918. p. 31. (In Russian.)



remembered that Guchkov, the Minister of War, had once been a minister of the Czar's, and that Milyukov, the Minister of Foreign Affairs, had at an unhappy moment risen in the Duma and announced that if a revolution were necessary for victory, he would prefer no victory at all. Under these circumstances it is not strange that the relations between the Government and the Soviet began in suspicion and jealousy.

For several months the Soviets merely sat behind the scenes and pulled the strings. They drew up the terms on which they would tolerate the authority of the existing government. They presented their demands through a "committee of contact" and practically dictated policies. The Workmen's and Soldiers' Council drew up the famous order abolishing the death penalty in the army and destroying military discipline, and the order was duly authorized by the ministry. When Guchkov, who was probably the strongest personality in the cabinet, but utterly without popular backing, made an effort to restore the old discipline, the Soviets drove him from his office. Milyukov dared to defy the peace program of the Soviets and to reaffirm his imperialist ideals, but his party, the Constitutional Democrats, bowed before the storm of opposition and he also was compelled to resign. There was scarcely a demand made by the workmen which the cabinet of Prince Lvov was able to resist. A determined purpose existed nowhere but in the Soviets. "The workmen in the factories," says Emile Vandervelde, the Belgian socialist who at this time was on a political mission in Russia, "were at that moment (May, 1917) the masters of Russia. . . . The Soviet which represented them as well as the soldiers constituted the only political power capable of making itself felt in the country, for they alone had power at their disposal. They had their militia; they were closely associated with the soldiers; and especially they had cohesion and capacity of coordination. There were neither police nor armed guards of any kind to oppose their will."<sup>2</sup>

This use of power without responsibility could not continue indefinitely. But though the Soviets agreed to let their leaders enter a coalition government, the antagonism between the two forces continued. The growing radicalism of the ministry failed to keep pace with the spread of the Bolshevik gospel. As economic and military demoralization grew more serious, the demands of the people became more exorbitant and more insistent. The Government knew not how to make head against the pressure of the current and so was hurtled along its fatal course to the inevitable catastrophe. Despairing talk was its substi-

2. "Three Aspects of the Russian Revolution," London, 1917, p. 42.

tute for action. After the disaster following the July 18-August 1 offensive, representatives of all organized groups gathered in a great congress at Moscow where everybody made speeches emphasizing the perilous situation of the country. Bitter truths were bravely uttered. Again the voice of Guchkov was raised to declare that the chief trouble with the Government was that it had no power. "The revolutionary democracy which was created first in Petrograd and then throughout the country is at present the actual master of the situation."<sup>3</sup> Every minister arose in turn to make a pathetic exposure of the affairs of his department. Several weeks later, General Kornilov, in announcing his revolt, gave as his justification the incompetence, weakness, and indecision of the government and its yielding to the pressure of "the Bolsheviki majority in the Soviets."<sup>4</sup>

The mysterious circumstances connected with the uprising of Kornilov, the suspicion, not up to the present time cleared away, that Kerensky, the one popular man among the ministers, had somehow or other compromised with the military party, did more than any preceding event to undermine the Government. Failures in administration might have been tided over, but against loss of faith the leaders had no remedy. The Bolsheviki were quick to seize their opening and to stigmatize the Minister President as "counter-revolutionary." They were generally believed. From this time forth their star was in the ascendant and the progress of the revolution has to be followed with the clue which they provide.

### *The Bolsheviki*

It is clear that in the summer of 1917 the workmen's Soviets were the real power in Russia, and that in these Soviets the Bolsheviki had by September or October become completely the masters. They had gained this mastery by virtue of their implacable adherence to a single-minded policy, and their readiness to employ any measures that would help them to attain their end. A French military observer who looked upon their propaganda with great horror, was forced to admit that they alone among the Russian parties seemed to have a program which, abominable though it was, had the advantage of being definite and precise. It seemed to him as if every man of energy and daring in the large cities was an unqualified supporter of Bolshevism.<sup>5</sup> Whatever the causes of indignation against them, no one who has been on the

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3. A. J. Sack. "The Birth of the Russian Democracy," New York, 1918, p. 460.

4. *Ibid.*, p. 476.

5. René Herval: "Huit Mois de Révolution Russe." Paris, 1918, p. 110.

scene is disposed to deny the courage, the enterprise, and the enthusiasm of the Bolsheviki—qualities which go far to account for their success.

The great event which the Bolsheviki wished to bring about was the seizure of the wealth of the world by the workers, to be used for the benefit of the workers. This they looked upon as an international movement, a movement which could not be carried out successfully unless the workers of the whole world participated in it. Russia, for them, merely happened to be the country which formed the nucleus and provided the base of operations. To the charge of treason they were supremely indifferent, for patriotism and loyalty were not theoretically in their catalogue of virtues. But their program, while it doubtless looked to large constructive designs in the distance, was for the time being purely negative. It had immediately in view only the grasping of power, the overthrow of the existing government and of every institution surviving from the old regime. The entire political and social structure of Russia had to be swept away in order to prepare the ground for the building of their own dream. When it is merely destruction that is to be accomplished, the most violent means are the best, and when there is nothing to be saved, there is no incentive to precaution. The Bolsheviki conducted their campaign with the shrewdness of practical politicians and the moral irresponsibility of Supermen. Every symptom of popular distress they transmuted into a devastating fire. The people wanted peace, and they were told to wipe out their armies, for if men would not fight, there could be no war. To the cries for bread the Bolsheviki said, "There is plenty of land; seize it, cultivate it, and enjoy the food you produce. And if you want clothing, there are the factories, and your hands are accustomed to work. Nothing else is necessary." They gave advice that was palatable, and they promised whatever any considerable body of people desired. The convocation of a Constituent Assembly was something that all Russia was eagerly looking forward to: the Bolsheviki were shrill in their outcries against Kerensky's delay in calling such an assembly and proclaimed their own solemn pledge to bring it about. If they could accomplish their object by parliamentary methods, they were content to make use of them; if not, they were equally ready to have recourse to mass violence. In all their outgivings at this time, nothing is clear or consistent except the determination to gain power at whatever cost.

Their principles and tactics appear incarnate in their great leader Nicholas Lenine, whose real name is Vladimir Oulianov. Lenine is an intense fanatic for whom all objects are valued in relation to the one idea of constructing a society on a communal basis. When warned that

his ideas threatened ruin to the revolution in Russia, his reply was, "So be it! But we shall kindle a world revolution! We shall pass on the standard to other lands and other peoples!" He accepts the disgraceful peace of Brest-Litovsk, "a brigand peace" he calls it, and is ready to accede to even more humiliating conditions for the sake of a little breathing-space in which to conduct his experiment. As for the temporary mutilation, what are five or ten years in the life of a country like Russia? Unlike other Utopians, Lenine does not base his hopes on faith in human nature. His incisive logical faculty penetrates into realities and his estimate of men is pretty low. He finds himself surrounded by characters of all degrees of disrepute, his ideas travestied in the minds of the unintelligent multitude. For every genuine Bolshevik, he admits, there are sixty fools and thirty-nine rascals, but he is too impatient to wait for the moral growth of men to bring about the changes he desires. He has confidence in his power to convert them into useful tools and perhaps hasten their moral education. To a man who dared so boldly manipulate the explosive forces latent in one hundred and fifty millions of untutored and uncontrolled human beings, the game with the mechanical German bureaucrats must have seemed very trifling. In the pursuit of his aim Lenine would not have balked at more serious violations of the conventional code of honor than was involved in accepting German money or German assistance of any sort. This utter and cynical unscrupulousness as to means characterized every step of his propaganda before he came into power, and it has marked his policy after he gained power when his task became one of getting unruly forces under control. Lenine is not to be classed with the democratic leaders who were prominent at the beginning of the revolution. Gaining ascendancy by the methods of the destructive demagogue, he ripened quickly into the role best suited to his talents and after a short interval emerged before the world the self-confessed dictator.

### *The Bolsheviks in Power*

In the light of a clear understanding of the spirit of the parties which opposed each other, the events of the Russian Revolution appear altogether intelligible; they even assume a kind of logical necessity. The Bolsheviks had made a test of force as early as July, 1917, but had found that they were not yet strong enough. In a few months, however, they gained in strength and confidence. The following figures for the voting in Moscow in June and September testify to the change that was taking place. The Socialist Revolutionaries fell from 374,885 in June to

54,374 in September, the Mensheviki fell from 76,407 to 15,887, while the Bolsheviks increased from 75,409 to 198,320. The vote of the Constitutional Democrats remained about the same: 108,781 in June and 101,106 in September.<sup>6</sup> In the weeks following the September elections, the Bolsheviks directed their efforts toward bringing about the exclusion of the Cadets, representing the middle classes, from a share in the government. Failing in that, they began preparations for overthrowing the government by force. The revolt broke out in Petrograd on October 25-November 7 and in Moscow on the next day, and meeting with almost no military resistance, it succeeded easily in both places. While there were many protests from democratic bodies, including a strike by the organized teachers, the only party to make serious trouble at first were the Anarchist-Syndicalists, who were disappointed that the Bolsheviks did not act rapidly or drastically enough. Against them measures of repression were promptly taken.

But most people did not find the new rule hesitating or gentle. The first measures of the Bolsheviks were the distribution of the land and the beginning of negotiations for peace. They remembered, too, their promise to convoke the Constituent Assembly and arranged for its election. The election, though conducted under their own auspices and, as is alleged, not with the strictest regard for a square deal to their opponents, was not altogether satisfactory to the Bolsheviks. They obtained only 154 seats out of a total of 495 while the Socialist Revolutionaries had 260. The weakness of the Cadet representation, 14 members in all, is possibly accounted for by the terrorizing of voters in the cities. The opposition came from the rural districts into which Bolshevik influence had not penetrated. The Bolsheviks tried to construct a lame pretext for questioning the validity of the elections, and at once launched a campaign against the Constituent Assembly, claiming that the Soviets were the only bodies truly representing the Russian people. It became evident to clear-sighted Russians that the Assembly was doomed to failure, that if it ever did meet, its existence would depend on subservience to the Soviets as entirely as did the provisional governments of Lvov and Kerensky. On January 5-18, 1918, the Assembly met. A radical group under the leadership of Maria Spiridonova broke away from the Socialist Revolutionaries and aligned itself with the Bolsheviks, but the moderate majority still retained control and elected Victor Chernov presiding officer. The Bolsheviks thereupon withdrew and on the following day sent a squad of armed sailors from the Baltic fleet to disperse the Assembly.

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6. René Herval, *op. cit.*, p. 108.

For five months following the dissolution, the defeated elements continued to hope in the justice of their cause. Allegiance to the idea of the Constituent Assembly was the passion inspiring the liberal opposition, as it was also the subterfuge of the monarchist reactionaries. Peaceful demonstrations in behalf of it were put down by the same bloody weapons as in the days of Czar Nicholas. The Second All-Russian Peasants' Congress, meeting in Petrograd in December, 1917, had, in spite of bullying, declared itself by a vote of 359 to 314 in support of the Constituent Assembly. The Bolsheviki in reply dispersed and outlawed the refractory majority and then declared that the Congress of Peasants was ready to support the Soviets. The Third All-Russian Peasants' Congress, which met on January 10, 1918, had similar sympathies and was similarly treated. Discontent continued to express itself, but the Bolsheviki simply rode rough-shod over every party and group that stood in their way. They dissolved meetings of hostile political parties and persecuted leaders of opposing factions. They exercised a severe censorship over the press. They refused to recognize local governments chosen in September, 1917, on the basis of universal suffrage. They even did violence to the sacred institution of the Soviets and dispersed such bodies when the majority happened to be adverse to them. They are also charged with a multitude of atrocities, but in this perhaps they suffer an injustice. It should be remembered that a very dark picture can be drawn of lawlessness in Russia under the provisional government. Doubtless license and criminality continued also under Bolshevik rule. There is no evidence, however, that this had the encouragement or sanction of the authorities. On the contrary, there is an impression of growing orderliness and discipline under the high-handed Bolshevik administration.

In May and June of 1918 the political unrest culminated in the sharp clash of civil war, disrupting the Russian state into the fragments which now remain and creating the situation which is still confusing the rest of the world. In April, 1918, there were said to be 132,000 workmen in Petrograd. About 100,000 of these, it is asserted, formed an organization, held a congress, and issued "instructions" to the workmen of Russia in which the government was arraigned and its resignation demanded.<sup>7</sup> A special delegation was sent to Moscow and brought about similar action by the workmen there in May. At the same time the eighth Congress of Right Socialist Revolutionaries was meeting in Moscow and adopting resolutions in favor of foreign intervention. A fraction of this party along with some other democratic groups,

7. V. I. Lebedev, in *Narodnaya Gazeta*, (New York), December 12, 1918.

among whom the Cadets were most prominent, formed the Union for the Regeneration of Russia and entered into official relations with the Allies. They were joined by conservative and reactionary bodies which had independently been preparing to fight the Bolsheviki. They established their first capital in Cossack territory at Samara. Though their government was called All-Russian and was professedly based on the elections to the Constituent Assembly, the Bolsheviki and their partners were outlawed as the Party of National Treason. A body of Czecho-Slovaks in the Ural region became the nucleus of their National Army, and negotiations were begun for the landing of Allied troops at Archangel and Vladivostok. Civil war was on.

Association with notorious monarchists and the calling in of foreign assistance turned out to be serious tactical errors. It gave the Bolsheviki a chance to play not only on the favorite watchwords of the revolution, but on the hitherto despised sentiment of patriotism as well. Their hands were immensely strengthened and they felt justified in increasing the pressure against their opponents by way of reprisal. Pointing out that many of the Right Social Revolutionaries and Mensheviki were working with the Czecho-Slovaks and Allies against the revolution, they voted to exclude those parties from membership in the Central Executive Committee of the Soviets.

Subsequent events tended to vindicate the position of the Bolsheviki. They proved that the democratic elements in the newly organized governments were not strong enough to sustain their part and sooner or later fell victims to the ambitious scheming of a military clique. In the western and southwestern provinces dominated by the Germans, it was to be expected that the reactionary elements should control. But what was to be thought of the proceedings of the Government of the North at Archangel where the venerable socialist, Nicholas Tchaikovsky, had been established as president? An influential group was formed in favor of a dictatorship, Tchaikovsky was arrested by a Colonel Chaplin and put into prison. The refusal of our ambassador, David Francis, to countenance the act compelled the restoration of the president, but he was restored with only the shadow of power. The other members of his government were replaced with "safe" officials, and some of his followers, completely disheartened, left the country. In the Far East the spectacle offered by the personal ambitions of men like General Horvath and General Semenov was not edifying.

There still remained the "All-Russian" government at Omsk, which for many months was administered by a directorate chosen from among the members of a Constituent Assembly. To this government the

friends of Russian freedom attached their hope, but in the early days of November came the disillusioning shock. A party of officers arrested Avksentsev and the other socialist directors, accused them of Bolshevik leanings and treason, and without even giving them a hearing, deported them swiftly toward Japan. Admiral Kolchak was proclaimed dictator. The stroke was neat and complete. At first Kolchak mumbled something about giving the people an opportunity to choose their form of government and to elect a new Constituent Assembly, but actually he went about restoring the golden days of Czaristic rule. Popular assemblies were suppressed, political discussions forbidden, and the sale of vodka reestablished. The record of atrocities committed by him in the name of order has not been widely advertised, but an American correspondent tells of 1200 Bolsheviks dragged in a train backward and forward from station to station till most of them perished of cold and hunger while the living lay in torment beside the bodies of their dead companions. Admiral Kolchak's idea of governing Russia is revealed by some of his remarks to this correspondent. "In a deep sense," he said, "Russia was democratic under the Czars. . . . Russian people understand nothing about socialism—whether that of the Bolsheviks or any other sort."<sup>8</sup>

The Bolsheviks point to these events as demonstrating the force of their claims that they alone are both willing and able to create an order which shall assure social and economic justice to all. True, their methods are dictatorial and undemocratic. The dilemma is a dictatorship of the Bolsheviks in the interest of the masses or a dictatorship of Admiral Kolchak in the interest of the old bureaucracy. Whether fairly or not, this is the form in which the alternative presents itself to the Russian people. The revolution stands to them for certain definite gains which they are loth to relinquish. There is doubtless also the feeling that it will be easier to correct the excesses of Bolshevik rule than to wrest concessions from restored privilege. And so they cling to the evils which they have rather than fly to others that they know too well.

It may be seen now how the civil war has strengthened the grip of the Bolsheviks, in the first place by providing them with a *bona fide* excuse for making their government purely partisan, and in the second place by discrediting the opposition which allowed the rival governments to drift into the power of the feared reactionaries. Deprived of their leaders, who were either driven into the recesses of their own vast country or scattered over the face of the globe, the people who had

8. Herman Bernstein, in *New York Herald*, Jan. 27, 1919.



stood out in protest were compelled to make the best of their situation. To what extent the Bolsheviki have captured the confidence of the population it is impossible to judge at our distance from the scene, but it can scarcely be questioned that a considerable number of those who had been standing aloof, and some prominent persons among them, have by degrees been reentering the life of the nation. The Socialist Revolutionaries have formally abandoned their struggle against the Bolsheviki, giving as their reasons the defeat of Germany and the fact that "the intervention in Russia by the victorious powers is assuming more and more the character of assistance given by the bourgeoisie."

The spirit of the government has not been uncompromising. The party has abated the rigor of its principles for the sake of immediate results. Overtures have been made to leaders of other socialist groups with a view to bringing about a *modus vivendi*, and these have met with some response. In spite of the accusation of opportunism by the more fanatical, concessions have even been made to the prejudices of the bourgeois class. One American correspondent, recently returned from Russia, had his revolutionary sensibilities outraged by what seemed to him a restoration of a middle-class ideal of order and seamliness in the outward aspect of Russian life. Whether these manifestations are to be interpreted as symptoms of weakening or of increasing confidence depends altogether on the sympathies of the interpreter.

What can be asserted with some assurance is that the Governments of the Allied countries are undergoing a change in their attitude toward the Bolsheviki. Not that they are a whit more inclined than ever to endorse their principles. But they have officially admitted that the policy of military intervention was mischievous. They perceive that the Bolshevik authority is for the time the only authority that counts in Russia, and they are resigning themselves to the necessity of negotiating with it. On their part the Bolsheviki are manifesting the same spirit of compromise as in their domestic policy. Far from shunning contact with the "capitalist" and "imperialist" rulers whom for two years it has been their chief pastime to denounce, they have declared their readiness to refrain from official propaganda, to pay all their foreign debts, and to enter into economic relations with the Allies. The repugnance to the meeting at Prince's Island proposed by the Peace Conference has been shown primarily by the Kolchak government and by those exiled representatives of Russia whose credentials are the most questionable.

In an address to the workingmen last April, Lenine declared, "We have won by methods of suppression. We will be able to win also by methods of management." The Bolsheviki were faced with a task of gigantic proportions. They had to devise and set in motion a new and elaborate machinery for controlling the political, economic, and social relations of a vast population. More adverse conditions for the work could hardly have been imagined. Their richest farming and industrial provinces torn away, the economic foundations of their life disrupted, hemmed in and isolated from the rest of the world, without access to the sea and to the materials necessary for a revival of normal activity, fighting domestic and foreign foes within and without, dealing with an untutored population that had grown accustomed to looking upon its demands as the law of the land, having no leaders experienced in affairs of state or in the management of great business undertakings, the immediate and ignominious failure of the Bolsheviki would have been no occasion for surprise. For more than a year it has freely been predicted as imminent in a week or a day. Perhaps the doom is not far off, but meanwhile it is of interest to observe the efforts of the government to solve its important economic problems.

The first great task which confronted the Soviet was the settlement of the land question. Practically all parties in Russia agreed that the land ought to be distributed among the peasants, but the method and principles of distribution involved many nice and complicated problems requiring time and study for their satisfactory solution. Prince Lvov's government had appointed Land Committees to exercise control in the transition, to prevent lawless appropriation, and to settle disputes between peasants until such time as the Constituent Assembly should meet to make definite enactments. But the peasants were impatient and feared that the property, which they had already come to regard as theirs, would be seriously damaged and despoiled. Upon these fears the Bolsheviki played in order to undermine the supports of Kerensky's government. Their first act after seizing power was to issue a decree abolishing the right of private property in land without compensation to the owners.

Its operation was what might have been foreseen. The enforcement of the loose provisions was in the hands of small local groups which proceeded to divide up according to their own notions of equity and right. It resulted in a free-for-all scramble. The man who had two carts carried off more movables than his neighbor who had only one. The farmer best provided with seed planted the greatest acreage. It is

alleged that the distributing committees were not above taking advantage of their opportunities, and that the person who benefited least by the change was the very one in whose favor the revolution had been proclaimed. It does not need a very credulous mind to believe the many stories of pillage and destruction which the temporary dissolution of authority made all too possible.

The more detailed Land Decree which they issued in September, 1918, seems to recognize the defects of the former decree and to look forward to the correction of its errors.<sup>9</sup> In theory the land is now completely socialized. It is the property of the state, which is loaned to individual tillers to be cultivated for the public benefit. In fact, however, most holdings are in the hands of peasants who think the land has been given to them as a free gift in perpetuity. The Decree admits that the socialization of the land has not been fully accomplished and outlines an elaborate set of instructions which is to govern its gradual distribution. "The apportionment of land on the production and consumption basis among the agricultural population is to be carried on gradually in various agricultural sections, according to regulations stated herein." Meanwhile "the relations of agriculturalists will be regulated by the land departments of the Soviets in accordance with a special instruction."

Evidently the task before the government is to wean the tiller of the soil from his personal attachment to it, to develop in him an attitude toward it like that of the workingman for his craft and its machinery, and it is proposed to do this by encouraging the peasant in every way to organize in groups for cultivating on a large scale. The land departments are entrusted with the duty of developing collective homesteads in agriculture (in preference to individual homesteads) as the most profitable system of saving labor and material, with a view to passing on to socialism. In arranging the order in which land is to be apportioned, it is provided that preference be given to laboring agricultural associations over individual homesteads, and again, in offering specific aid for the general tilling of the soil, in the form of machinery, seeds, education, preference is given to communistic and cooperative homesteads.

The Russian peasant has during the last fifteen years been learning rapidly the lessons of cooperation.<sup>10</sup> He has an enormous network of organizations of producers and of consumers, supported by credit asso-

9. The text of this decree is printed in *The Nation*, Jan. 25, 1919 (International Relations Section).

10. See the interesting booklet by J. W. Bubnoff: "The Cooperative Movement in Russia", Manchester, 1917.

ciations, with the People's Bank of Moscow serving as the financial heart. These have been a beneficent force in the life of the Russian agriculturalist. They continued to expand during the war and they are the one feature of Russian economic life with which the Bolsheviki have not tampered. The difficulties placed in the way of private ownership have already resulted in a great access of power to these cooperatives, and the prestige which they have earned may prove helpful to the Bolsheviki in their endeavor to impose communism on the Russian peasant. It will also be open to the government to effect its aims by coercion through its monopoly of the grain trade and the trade in agricultural implements.

News that reaches us of economic conditions in Russia is not calculated to create confidence in the ability of the Soviets to set the country upon a prosperous course. In the factories the lowering of the output has been enormous and continuous. It is stated officially that only three percent of employees in the West Moscow textile region are at work. In a certain district of Soviet Russia only forty sugarfactories remain where there were once 232. The five hundred and thirteen industrial and commercial undertakings which have been nationalized up to the beginning of 1919 have yielded losses to the state and have adversely influenced the returns from privately owned enterprises. Owing to the breakdown of transportation there are wide differences in the prices of commodities at various points and the influence of the government has not availed to bring about uniformity. "At a time when the best quality flour was selling in Petrograd at 700 rubles a pud, it could be bought at Tver for 63 rubles." The supply of food is scant, and in its distribution the "bourgeois" are made to suffer in order that they may be forced to enter the ranks of the proletarians. The condition of the national finances may be inferred by economists from the statement that 30,000,000,000 rubles in credit notes have been issued since January 1, 1918. If these facts are typical, they constitute the severest possible arraignment of Bolshevik rule, and the Russian people must be reaching the limit of their endurance. It is true that the leaders can plead in excuse that they are the victims of foreign enemies, especially of the bourgeois class, who are bent upon throttling their popular experiment by military as well as by economic coercion, but excuses will not long be accepted as a substitute for results. Unless there is some truth in the assertions on the other side, that in the last few months a decided improvement has been in evidence, it is difficult to see how the present government can survive.

# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XVI

MARCH 10, 1919

No. 28

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

## Asiatic Turkey Its Problems and Resources

BY

FREDERICK HAYNES NEWELL

Professor of Civil Engineering



Price 10 cents

PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA



## ASIATIC TURKEY—ITS PROBLEMS AND RESOURCES

The Turkish Empire, with its great but only partly developed natural resources and declining political strength, has long been regarded as a tempting prize by the more powerful governments of Europe. It would long since have been torn apart and its fertile lands divided, had there not existed certain mutual jealousies which have served to bring in turn to the support of the "sick man of Europe" one or another powerful force — each hoping by the preservation of Turkish rule to keep from its rival the acquisition of Turkish territory and ultimately to find profit for itself. The great world war was unquestionably incited largely by the peaceful but effective penetration by Germany into and through Asiatic Turkey. The unstable condition of European policy was rendered even more dangerous by the rapid building of the Berlin to Baghdad railroad pointing directly toward India.

Tho for the time being the German Empire has disappeared from the map and Russia can no longer threaten England's supremacy in India, the Turkish questions continue to have alarming proportions. This is largely due to the fact that misrule — culminating in the indescribable massacres of the recent war — has convinced the awakening world that the Turks can not safely continue as the dominant class and that immediate steps must be taken to organize some form of government which will permit the millions of people lately under Turkish rule to enjoy life, liberty, and the pursuit of happiness and at the same time facilitate the expansion of trade and commerce made possible — and even necessary — to the rest of mankind by the natural wealth of the country.

The continuation of the Turks as rulers in Western Asia is no longer to be seriously considered; they must be replaced, but by whom? It is hardly possible to conceive that any of the subject peoples can assume effective control. Altho they have lived in adjacent villages or mingled in the market places, there has been cultivated and kept alive by the Turkish government such intense racial and religious hatred that the possibility of their working together in the near future to form an effective government is beyond belief. Moreover, it is a serious question whether even in a few decades it will be possible to develop free institutions and effective autonomous government among these peoples who for hundreds of years have acquiesced more or less hopelessly in the rule of outsiders, and who have not had the opportunity possessed by many of the nations of Europe to acquire the arts of self-government.

Is it not absolutely necessary for a generation or two that they be under the control of some strong authority which will reverse the policy of the Turks and which will seek to develop among them the habits of mutual toleration and respect upon which free institutions rest?

But why should we here in America be concerned about these matters? Why not let the governments of Europe settle these troublesome problems among their neighbors or, if this can not be done — simply keep hands off and permit the various peoples of Asiatic Turkey to work out their own salvation, the more powerful or aggressive forcing a solution according to their ability?

Unfortunately perhaps for us, the most favored among nations, the time in the history of the world has passed when we can maintain our splendid isolation. Our commercial and economic interests, as well as the moral obligations growing out of the war, have become too greatly involved to be ignored. Any struggle which originates in Asiatic Turkey and which must necessarily bring in one or another of European nations will deeply concern the whole world and injure American interests which already are too vast to be thrown away and which tend rapidly to increase rather than to diminish.

Americans have a peculiar concern with the affairs of Asiatic Turkey and its future development, not only because the land is full of historic cities and was the birthplace of the great religions of the world, but more especially from the fact that in area, topography, climate, and in engineering and industrial problems, it is similar to our own arid west. There is a strong commercial attraction, as well as a fascination in the land, a call for service, a longing to put to the test in Western Asia some of the experiences acquired on this continent; a desire to show the practicability of American skill and enterprise in reviving the historic places and in putting to the use of mankind the great resources which have lain dormant for centuries under Ottoman rule.

Civilization originated or reached its highest development in what we usually consider as arid lands, not in the densely forested and wet regions of Europe, Asia, or Africa, but in those parts ordinarily too dry for the production of the common food crops.

Where life was simple and where the daily needs of food were met by hunting in the forests or by fishing in the streams, man apparently did not advance far beyond the satisfying of these needs; but in the drier lands, where the climate was conducive to health and yet where food could be procured only intermittently through the overflow of



rivers, there man was forced to be provident, to look ahead far enough to plant and care for the crops which would yield a return only after weeks or months. As he advanced higher in the scale, the overflow of rivers obliterated his landmarks and forced him to make practical applications of the principles of geometry; the need of the regulation of overflow led him gradually to develop engineering practises or a knowledge of hydro-economics which marks the beginning of the work of the civil engineer.

In the Biblical tradition as to the origin of the human race the land of delight, or Paradise, was placed in what is now known as Mesopotamia — down on the Euphrates, the great stream whose waters before the dawn of written history were regulated or divided into the four rivers or, as we would now term them, canals, which irrigated the great area, at present largely marsh, to the south and east of Baghdad. Here were located the vast city of Babylon and many other ancient centers of wealth and empire; while near Kerbela, according to Arabic and other traditions, was the home of Noah and his contemporaries.

However we may regard these legends, there is no question but that canals of antiquity, built thousands of years ago by engineers whose names and nationality are unknown, furnished water to millions of acres of highly cultivated land supporting a great population, the ruins of whose cities are to be seen on every side, and whose culture and traditions have had great influence on the past and have been handed down even to the present day.

While the ancient lands of Babylonia are most alluring from the magnitude of the canals and structures (such as will be built in the near future), there is an infinite variety of interest and opportunity throughout Asiatic Turkey. This area embraces the widest possible range of topographic conditions, from the snow clad peaks of Ararat rising to an altitude of 17,000 feet to the Dead Sea depression more than 1200 feet below sea-level. In this respect it is more extreme than our own arid west, where the highest peaks in the Rocky and Cascade mountains do not attain much above 14,000 feet and the lowest depression, that of the Salton Sea, is about 300 feet beneath the level of the ocean.

A striking resemblance between these two widely separated countries is afforded by the climate. The greater part of Asiatic Turkey is arid or semi-arid. The surface is broken by high mountains, whose steep slopes or summits wring from the clouds the rain or snow fall which gives rise to innumerable small streams. These descending with rapid

fall are usually lost in the parched valleys. Sometimes in flood these rivers penetrate to considerable distances from the mountains and may even force their way to the ocean; but for the most part their waters either sink into the thirsty sands and gravels around the edges of the valleys or disappear in marshes, salt lakes, or sinks, similar to those of Utah, Nevada, and eastern Oregon.

Throughout this part of western Asia as well as the western United States, the possibilities of progress are found in the occurrence or absence of the most valuable of all minerals, that is, water. Without it the lands, even where the soil is very rich, are worthless; but where water can be had in proper quantity and of good quality, agriculture and other industries can flourish and have flourished; a high degree of prosperity has been reached, checked only by devastating wars or destroyed by the long continued misrule of the Turks.

In considering the reconstruction of Asiatic Turkey, the restoration of its ancient cultural conditions, or the extension of industry, the first and foremost undertaking, after a fair and stable government has been assured, is the conservation and use of the water supply, scanty in most places but abundant in others.

Before any considerable development of the water resources can take place, it will be necessary to build highways and railroads — the conditions here being similar to those encountered in our own arid west, where the first step in utilizing the public lands was the building of railroads and the construction of roads over which could be moved economically the labor and materials needed in the building of dams for storing floods and in the excavation of canals, tunnels, and other works needed in the conservation of water. Care must be taken, however, to locate and build these railways where they will not interfere with the future building of reservoirs or the development of water power.

The water power resources of the country as a whole, particularly in Armenia near the headwater of the Tigris and Euphrates, are large, and the first operation toward construction work pertains to the study of these water powers and to the consideration of how these may be used practically in the building of other needed improvements. Fuel is expensive, and altho coal mines do exist, the coal is not available at points near where most of the heavy work must be undertaken. Petroleum is known to occur in many localities, some of which have already been acquired by the British; but the use of fuel oil for producing power in large quantities should not be encouraged if water power can be employed.

In what has been said above, reference has been had mainly to the great inland country. The lands bordering the Black Sea on the north or the Aegean and the Mediterranean on the west are, as a rule, low and humid, having a rainfall adequate for the production of most crops and a genial or even hot climate contrasting strongly with the cooler, more extreme temperatures of the plateaus and mountains which make up the greater part of Anatolia and Armenia. These fringing lands not only differ in climatic conditions but are inhabited by peoples quite unlike those living inland. Here the problems of engineering importance include not only the building of railroads and highways, but also the dredging out and improving of harbors and the draining of lands, particularly those near the mouths of the streams which come from the highlands. While irrigation is essential to agriculture throughout the greater part of the remaining area, its counterpart — drainage — is needed in the coastal region.

Included with Asiatic Turkey and until the present time forming part of it, altho quite distinct in many ways, is the Arabian desert covering the greater part of the peninsula which juts far to the south into the Indian Ocean. The interior is little known; few travelers have penetrated the wilderness sparsely occupied by wandering, hostile tribes of Arabs, "the People of the Camel," but enough is known to indicate that there is a limited water supply which in a few localities was developed centuries ago, most of the works being now in ruins. It is quite possible that a thoro geological exploration and the sinking of deep drilled wells may reveal the existence of artesian or other water, as has been found to be the case in portions of our own so-called American desert. The construction of wells is one of the first undertakings to be considered in this vast area.

Fringing the Arabian desert on the northwest between the wilderness and the Mediterranean lies a narrow strip of country of intense concern to all peoples, namely, Palestine, for centuries the home of the Jewish race. Altho a relatively small spot on the map, it possesses extraordinary interest. For the greater part it is semi-arid; only a small percentage of the land is suitable for cultivation; but these lands, if supplied with water, can be made highly productive and capable of supporting a larger population than that now living within the country. It possesses little or no mineral wealth, and its value from a commercial standpoint may be said to reside almost entirely in the tourist or pilgrim traffic.

Palestine and the peninsula of Sinai are cut off from the Arabian desert to the east by one of the most extraordinary of natural phenomena, the depression of the Dead Sea. This has been formed by the dropping of a long slender portion of the earth's crust, thus forming a steep-sided valley at the bottom of which the Jordan river runs from north to south and loses its water in the lowest point, now occupied by the Dead Sea, more than 1200 feet beneath the level of the Mediterranean. This long narrow valley forms a formidable obstacle to travel, especially to the construction of railroads and highways directly from the Mediterranean into or across the Arabian desert toward Baghdad.

Because of this condition, namely, the deep narrow valley and the broad desert, travel and trade have been confined largely to the sea coast; in going from the highly cultivated lands in Egypt to the densely populated area in the vicinity of Baghdad the caravans have crept up northerly along the Mediterranean to a point west of the upper end of the valley of the Jordan and then turning easterly have cut across to the Euphrates, avoiding the more direct desert route. There are known to exist, out on the desert, the ruins of ancient places, which indicates that water has been had and possibly may be had again. It is believed that the lines of travel may be shortened and made more direct by the discovery and development of underground water supply.

The greatest of all undertakings, however, as far as the food supply and the future prosperity of Asiatic Turkey are concerned, is the complete irrigation and drainage of the vast plains and low lands between the Tigris and Euphrates rivers extending down to the Persian Gulf. Here have dwelt at various times millions of people; here were constructed and operated for centuries large canals, not only those leading from the Euphrates but others taking water from the Diala and other streams issuing from the Persian highlands to the east. These great works of ancient times have been neglected and many of the canals have become filled by drifting sand or, occupied by the unregulated mountain streams, have lost their character as artificial channels and appear as creeks or rivers.

Shortly before the outbreak of the great world war, the Turkish government employed Sir William Willcocks to begin an examination with a view to restoring some of these works. Fortunately operations had progressed to such a point that when the British occupied the country in 1917, they were able to put into use a hundred of the smaller Arabian canals and get under cultivation approximately 300,000 acres of land. The corn, rice, and other foodstuffs produced on this land

were of inestimable value in maintaining the British army and in reducing the transportation of supplies from overseas.

With a stable government assured the time will not be far distant when storage reservoirs and power development should be planned at the head waters of the Tigris and Euphrates. All of this work should be controlled in accordance with the superior uses in irrigation of the water lower down in Mesopotamia and Babylonia. Endless troubles are likely to arise if an attempt is made to include under one government a portion of the headwaters of these streams, and under another the lower portions where the waters are employed in agriculture.

Irrigation is not by any means confined to the regions watered by the Tigris-Euphrates and their tributaries. Here, it is true, are the largest canals and the greatest extent of nearly level land capable of being utilized in the production of crops. To the north on the plateaus and in the valleys of Anatolia and to the west in Syria the artificial watering of agricultural fields has been practised from time immemorial. There are innumerable small irrigation systems utilizing the water of mountain streams, as at Damascus, Aleppo, and other important cities, making possible the maintenance of a large population and diversified industry through the ability to obtain foodstuff in the near vicinity.

Most of these irrigation systems have deteriorated through lack of helpful governmental control and oversight; the efforts of the cultivators have not been properly directed nor have they been encouraged or even permitted to make many needed improvements. The entrance of the Germans into portions of Asiatic Turkey marked a new era, in that the irrigation possibilities were appreciated and various enterprises entered upon, the most notable being in the vicinity of Konia, the ancient Iconiun, the former capital of the country. Here the outlet of one of the large lakes behind the mountains west of Konia has been controlled and a suitable canal provided to carry the water to the edge of the desert southeasterly from Konia. This has permitted a wide expansion of agriculture, and the success here illustrates what may be accomplished elsewhere.

The agricultural products of Asiatic Turkey are as varied as the climate, and range from the highly valued tropical and semi-tropical fruits, dates, oranges, figs, and the like, to the more bulky but essential field crops of the plateaus and mountain slopes, such as barley, wheat, and corn. There has always been a considerable export trade, especially of dried fruits; and the country as a whole has produced more than has

been necessary for the sustenance of its inhabitants — this being due in part to the low standard of living. There is a possibility of notably increasing the agricultural area in all parts of the country especially through the conservation of water and the development of irrigation; but the largest gains will come through better agricultural methods, notably from the use of artificial fertilizers.

Grazing, on the open sheep and cattle ranges, covers by far the greater part of the land surface, as is the case in western America. In both of these countries it is highly probable that on account of the scarcity of water the tilling of the soil will not require at the utmost more than 5 per cent of the area of the country, while over 80 per cent of the land, if utilized at all, must necessarily be devoted to grazing. In this classification as grazing area may be included the vast deserts where, tho feed for cattle or camels is scanty or even entirely absent for months or years at a time, yet, following one of the rare rains, there springs up a sparse growth which is utilized by the wandering herds. This desert or semi-desert country, like that of New Mexico and southern Arizona, will be more completely utilized when, as stated above, it has been possible to search out the sources of water and dig or drill wells to furnish a supply for the animals, which with such water resources will be able to graze over considerable tracts of scanty herbage.

Forests occupy perhaps 10 per cent, more or less, of Anatolia and Armenia; they are confined to the rougher higher country, the elevated table lands and mountain slopes. Much of the woodland is open, with scattering trees and shrubs, and might be classed either as grazing land or as forest, the conditions being similar to those in our own country where many of our great national forests contain relatively few large trees and are valuable chiefly for grazing purposes. Nevertheless, this tree growth should be encouraged, as it has great value in furnishing timber in a country where this is greatly needed and in favoring water conservation. The destruction of the forest growth by unregulated grazing, particularly by goats, has greatly reduced the prosperity of the country.

The known mineral resources, while valuable and attractive, are not so large as might be anticipated in a country of this extent, being far below those of an equal area in the United States. As in our own arid west, the absence of large deposits of coal is particularly notable. There are, however, a certain number of coal mines, which have been worked for many years and which under better political organization will undoubtedly be more largely utilized.

Copper and the more precious metals occur in a few localities, and gold mines have been worked from time immemorial. The legendary wealth of Croesus was derived from the auriferous streams in western Anatolia.

Petroleum is for the present the most important of the raw materials. It has been known and used from earliest times, the pitch of Hit being employed in making water-tight boats and for embalming purposes. Reconnaissance of the oil fields and localities where oil may be discovered has been conducted by agents of the Standard Oil Company and by British officials. The results have not been made public, but enough is known to lead to the belief that extensive deposits may yet be revealed by deep drilling. The oil fields on the extreme southeast in or near Persia have been largely developed by the Anglo-Persian Oil Company. The utilization of the oil from this field was one of the most important factors in aiding the British in the advance of their army up the Tigris River to Baghdad. In fact it may be said that the control of these valuable deposits of oil is one the great factors of international importance and of future commercial success.

The above enumeration of the resources of the country, the comparison of present conditions with possible improvements, and prospective gains to individuals or to states, emphasizes the danger which will continue to threaten the peace of the world if this vast country is left in its disorganized and helpless form as a tempting bait, to arouse the predatory instincts of men in control of corporate or national forces. The many diverse races or religions held together in one empire by the ruling Turkish class are each clamoring for independence and are asserting the claims of nationality. This condition has been recognized in the proposed covenant of the League of Nations as reported to the Peace Conference, February 14, 1919, in Article 19, paragraph 4, where the following provision appears:

“Certain communities formerly belonging to the Turkish Empire have reached a stage of development where their existence as independent nations can be provisionally recognized, subject to the rendering of administrative advice and assistance by a mandatory power, until such time as they are able to stand alone. The wishes of these communities must be a principal consideration in the selection of the mandatory power.”

This brings up the question as to whether in fact — as opposed to theory — these communities are so located as to permit their segregation geographically as separate states, or whether the nationalities are

so intermingled as to render the "unscrambling" as difficult as it has been found to be in the Balkans.

The country as a whole is usually considered as falling into certain divisions as follows:

1. Armenia, on the northeast. This is made up of high plateaus and snowy or forest clad mountain masses from which issue the great rivers. Here the agricultural conditions and possible industries are quite distinct from those of other portions of Asiatic Turkey. This country might be more or less arbitrarily outlined and set off as the home of the Armenians, but even here they are in the minority, being outnumbered by the Kurds and other peoples who occupy the land.

2. Anatolia or Asia Minor proper. This lies farther west and is composed of somewhat lower and more arid plateaus. It is the home of the Turkish peasantry, which is here the predominating class and race.

3. Mesopotamia and Baylonia stretch from the foothills of Armenia toward the south and east to the Persian Gulf. Here is the land of extreme heat — a country needing irrigation but capable of supporting an immense population. It is now held by Great Britain; the Arab tribes and town dwellers appear to be content under British rule.

4. Arabia with its great desert — the home of the Bedouin — with its fringing sea coasts and sacred cities of Mecca and Medina has apparently been promised recognition as an independent kingdom of the Hejaz.

5. Syria stretching from the Mediterranean coast to the valley of the Euphrates and overlapping into Arabia has been largely within the sphere of French influence and is quite distinct in its cultural development. As part of Syria it is customary to include the small, but very important, country of Palestine, where it is proposed that the Jews may have a national home, tho at present the Jews are in the minority in that country and most of the land is owned and has been occupied for centuries by Arabic-speaking people.

6. The Greek islands and cities fringing the coast are distinct in climatic and industrial factors from the rest of the country, but are not easily separated from the more typically Turkish lands by any well marked geographical feature.

While it is relatively easy to point to a general map and say that this is Armenia and that Arabia, yet it is practically impossible to draw a sharp line or to select any natural boundary which can be agreed upon as definitive. This is peculiarly the case as between the sea coast:



cities inhabited largely by Greeks and the interior towns occupied almost exclusively by Turks. In no one locality is there a predominance of people of a sufficiently high degree of experience in self-government to permit the carrying out of the broad rule of self-determination. For example, a place may be known as a Greek city and be characterized by Greek culture and yet the total number of Greeks may be so small as to render it impracticable for them to control the vast majority of Muslims.

Moreover, any suggested division emphasizes the dependence of one part of the country upon the other. In trying to parcel out the the land in this way one state or governing body will be given practically exclusive control of the petroleum or other mineral wealth and another of products whose manufacture is dependent upon the use of these minerals or fuels. In a country of this kind the very diversity of topography and of mineral and agricultural resources emphasizes the fact that any attempt to divide or cut off these provinces from each other only intensifies the struggles for existence which must take place if the people—for ages accustomed to one government—are grouped into many small states.

Moreover, the population in each of these smaller areas, as indicated above, is at present not sufficiently homogeneous or experienced readily to adopt self-government. There is no one dominating factor or large number of people of the same characteristics or religion to form a safe working majority. For example, the Christian communities almost everywhere would be in a minority; if their ideals of self-government should be enforced, those of their more numerous Mohammedan neighbors must be neglected or suppressed.

In considering any division of the country according to nationalities it is important to emphasize that in Asiatic Turkey nationality is not so much a matter of ancestry or race as it is of religion. If, for example, the Armenian ceases to be a Christian and is converted to Mohammedanism he is no longer considered as an Armenian but as a Turk, and so on through the category. The Turks, at least the ruling classes, are not of Turkish descent except to a remote degree, as for generations the mothers of the Turkish rulers have been Christian captives or purchased slaves. Moreover, the different nationalities or religions are mingled together in nearly every important city, each having a considerable proportion of the various warring sects of Mohammedans, of Christians, and of Jews.

In spite of these difficulties it is generally assumed that there must be a division of the Turkish Empire into separate states; but in framing new constitutions the natural obstacles as well as those interposed by discordant races and religions must be given full consideration. There is need of more complete information and reliable statistics concerning the actual number and location of the various peoples who may be regarded as having proper national aspirations. The figures now available are contradictory and misleading; nevertheless, they indicate that, if Armenia is to be devoted primarily to the Armenians, then this minority ultimately must have full authority and power to hold in subjection the majority of the population who, tho perhaps not quite so high in the scale of civilization, are yet recognized as of sufficient intelligence to become citizens.

If the Greek cities are to pass under Greek control, there must be provision for protection of the interests of the non-Greeks who now form the majority of the population. In the same way there must be a system of treaty arrangements securing to the citizens of adjacent states the enjoyment of the use of water which arising in Armenia or Anatolia is needed for cultivation of lands in Mesopotamia, Syria, or near the Greek cities. Furthermore, the inhabitants of the lower lands should be assured of their rights to store or control the floods at the head waters even tho these are in the adjacent states. There must be ample provisions not only for freedom of commerce, but also for religious toleration and the pursuit of happiness. These things not having been permitted by the Turks, their conception in these regions where strife has been so long encouraged is almost unknown.

While the opinion of the world will probably not tolerate the return of the Turks to power and is inclined toward the division and subdivision of the country into smaller nationalities, yet there is little doubt that the general future prosperity and well being of all would be more readily secured by having the entire area held as a whole under the control of a single mandatory power broad enough and strong enough not only to prevent internal strife, but more than this to build up the attitude of mutual toleration and respect among the closely intermingled but mutually antagonistic peoples.

Assuming that the unity of the country cannot be preserved, it becomes apparent that steps should be taken to the end that an agreement satisfactory to all concerned may be arrived at allowing large bodies of people to be shifted from one state to another, the land being

exchanged or purchased, thus permitting the scattered Armenians to be brought together within Armenia and the Kurds, in part at least, to be moved to communities of their own.

While the difficulties involved in any of these proposed adjustments are great, yet it is believed that wise statesmanship based upon a full knowledge of the country, its people, and its laws will be able ultimately to overcome them. The crying needs of the natives, the depth of degradation and despair to which they have been subjected, and the contrast offered by the natural opportunities which surround them should inspire unselfish effort and confidence in ultimate success. Looking beyond the immediate toil and trouble involved there can be seen the vision of great achievement. Already the British in Babylonia have shown what can be accomplished in two years of just and intelligent control. Their success may be considered as a forerunner of that which may be achieved throughout the length and breadth of this land in securing permanent homes, prosperity, and happiness to its recently oppressed inhabitants.



# UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol XVI

APRIL 7, 1919

No. 32

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

## The New Poland

BY

PAUL V. B. JONES

Associate in History



Price 10 cents

PUBLISHED BY THE WAR COMMITTEE  
OF THE UNIVERSITY OF ILLINOIS  
URBANA

## THE NEW POLAND

In the year 1795 the "Republic" of Poland disappeared from the face of the earth. Despite her thousand years of independent existence, and an enviable record for remarkable achievement along many lines of human endeavor — political, religious, literary, artistic, and other — this ancient state fell ingloriously, an inert, helpless victim, to the merciless rapacity of her neighbors, Prussia, Russia and Austria, each of them with vulture instincts but greedy enough for their sorry repast. Despite the fact that Poland displayed some of her old time militancy, and tried to fight to the last, she was not really conquered by her enemies. She was simply "partitioned." The shameful spoliation began in the year 1772, under the able auspices of that ruthless autocrat, Frederick II. With a blasphemous humor characteristic of his age, this cynical Hohenzollern writes to his brother, Henry, on April 9, 1772, as follows : "The partition of Poland will unite three religions, the Catholic, the Orthodox, and the Protestant; Poland will thus be for us a sort of Holy Communion of which we shall all partake. If this act does not bring salvation to our souls, it will at any rate contribute considerably to the prosperity of our realm." — An observation entirely worthy of Voltaire himself!

Substantially a century and a half have elapsed since this grim tragedy was begun, but who can read to-day, without recoil, that amazing manifesto addressed to the Poles by Catherine II, announcing the first partition, and inviting their assistance in this major operation on their own body politic and fatherland! Asserting as causes for so drastic a procedure that turbulent Poland was a constant menace to the well-being of adjacent peoples and that these same neighboring peoples had, each of them, old claims on parts of her territory, therefore, this terrible proclamation continues "... his Majesty the King of Prussia, her Majesty the Empress, Queen of Hungary and Bohemia, and her Imperial Majesty of all the Russias, having mutually set forth their rights and claims, and having come to an agreement, will each take an equivalent of the district to which they lay claim, and will put themselves in effective possession of those portions of Poland which are calculated to serve hereafter as the most natural and secure boundary between them."

Such was the preliminary move in this altogether shameful transaction. A second operation, in 1793, lopped off additional segments of

the then moribund state, while a third act of partition, in 1795, completed the work, concluding as clear-cut a drama of survival as was ever played amid the political creations of men.

Students of Polish history find the remarkable weaknesses directly responsible for the ruin of this, one of Europe's greatest states, in Poland itself. Poland is a land of plains, with no really satisfactory frontiers, thus inviting attack by any aggressive neighbor with predatory inclination; a land made through conquest, and ill pieced together, lacking racial homogeneity with its Lithuanians, Ruthenians, and other peoples, different from the warrior Poles in language, religion, manners, and customs, never really assimilated, always mindful of their one-time independence and chafing to regain entire liberty; a land of two social classes only — a proud, fighting, proprietary nobility, and, ultimately, a degraded, utterly subservient, blackly ignorant serfdom with no stabilizing middle stratum such as makes back-bone for most states; a land, finally, with a political system as strangely and completely decrepit as any deteriorated governmental machinery told of in human history: a Republic with an elected monarch at its head, a kingship reduced, through the jealous fear of possible royal power, on the part of an independent nobility, to nonentity, to an empty manifest of rule, grasped at now and again even by venturesome foreigners. Full as serious a flaw as this was that curious *liberum veto*, formerly a staunch bulwark of their liberty for the nobles, now an abused institution, constantly operated by these utterly selfish, utterly unpatriotic lords of the land to thwart every act of the government. Some writers, noting the dark havoc wrought for Poland by a state of affairs so bad and so long enduring, affirm that the Poles deserved their fate; and these same students, observing the seventeen odd political parties vigorously flourishing in Poland to-day, gloomily shake their heads over this ruinous twentieth century recrudescence of the ancient national malady — assertive individuality and otherwise-mindedness — and assert that an independent Poland is an utter impossibility.

As a matter of fact it is highly probable that Poland could have amended her vicious system, had the time been afforded. Eighteenth century Poland, keenly aware of many of her problems, was indeed striving quite vigorously to handle them; unfortunately for her, other statecraft was at work, far stronger at the time than her own with its depleted vitality: mighty, uncouth Russia with her irresistible surge towards the attractive west, where alone chance for development seemed to lie; vigorous, half barbarous Prussia, with her ragged, piecemeal

snippets of territory, pointing for any dullard of a king an obvious policy of consolidation — and Frederick II was as alert and unscrupulous a monarch as ever growing state could desire.

Upon the annihilation of her state a strange chapter in Polish history opens. Approximately 300,000 square miles of territory with an estimated Polish population of 11,500,000 souls had been divided by Prussia, Russia, and Austria. To cut up and apportion was one thing, to assimilate, however, quite another accomplishment, as the three powerful and guilty states were to discover. The years from 1795 to 1914 mark in Polish annals a period during which those hapless people, existing perforce under three alien regimes, developed a more vivid national sense than ever they had known before; and when in the fullness of time the great war broke upon a horrified humanity, the Poles, Prussian, Russian, and Austrian, knew to a man that their hour of deliverance was at hand.

This strenghtening nationalism presents an interesting study. Of the three groups of submerged Poles that under the Dual Monarchy fared the best, and nearly attained, in late years at least, a complete autonomy. On the other hand, the Poles under the iron heel of Prussia endured most from their rulers, for, while the Russian autocracy was by instinct cruelly brutal, it was too poorly organized to be perpetually ruthless, and bore but fitfully on its victims; whereas the highly organized Prussian regime followed practically from the beginning a consistent policy of the sternest denaturalization or Germanization of the Poles.

Ex-chancellor von Bülow, an able exponent of the Bismarckian theory in this regard, well expresses the spirit and purpose of Prussia's policy as follows — "No concern for the Polish people must hinder us from doing all we can to maintain and strengthen the German nationality in the former Polish provinces. It is the duty and the right of the government to see that the Germans do not get driven out of the east of Germany by the Poles. The object is, to protect, maintain, and strengthen the German nationality among the Poles. . . . In the struggle between nationalities one nation is the hammer and the other is the anvil, one is the victor and the other is the vanquished."

To play her rôle successfully in this awful smithy game, Prussia fashioned for herself characteristic instruments; restrictions on the use of the Polish language, German only passing current in the schools, law-courts, public meetings, and finally in the church services; bans on Polish songs and the Polish national dress; reservation of governmental



offices for Germans or dependable Germanized Poles; and finally a drastic policy of German colonization in the Polish provinces which ultimately resulted in the harshest legislation, like those laws compelling Poles to sell out their land to Germans, the whole unnatural process heavily subsidized by the state.

And the Poles? So vigorously did they react, once they caught the tune, that before the Prussians were aware, this despised people matched case-hardened steel to Junker iron, and von Bülow himself didn't know whether the state were hammer or anvil. Statements like the following from the Polish press reflect the temper and purpose of these determined Slavs after one hundred years of Prussian control: "To-morrow the Kingdom of Prussia celebrates the second century of its existence. We cannot manifest our joy, because Prussia's power has been erected chiefly upon the ruins of ancient Poland. Prussia's history consists of a number of conquests made by force and in accordance with the old Prussian principle revived by Bismarck, 'might is better than right.'" And again, this violent diatribe: "If one asks a Pole whether he would rather live under German or under Russian rule his reply will be 'I would rather a hundred times have to do with Russians than with Germans, and the Prussians are the worst of Germans.' . . . The Russian is our Slavonic brother, and in his heart of hearts every Pole is glad if his brother is prospering and when he can tell the world, 'There you see our common Slavonic blood'. The more we hate the Prussians the more we love the Russians." Or, finally, this suggestive excerpt: "Take heed, you Polish women and Polish girls! Polish women and Polish girls are the strongest protectors of our nationality. . . . For a Polish woman it is a disgrace to marry a German or to visit German places of amusement or German festivals. So long as the Polish wife watches over her husband and takes care that he bears himself everywhere as a Pole, so long as she watches over his home and preserves it as a stronghold of Polonism, so long as a Polish Catholic newspaper is kept in it, and so long as the Polish mother teaches her children to pray to God for our beloved Poland in the Polish language, so long Poland's enemies will labor in vain."

Meanwhile, the Poles were doing something besides talking, and nursing a deeply burned hatred. They learned thrift from their German masters, formed remarkable co-operative organizations, and developed, under the management of their priests who well understand their people and their needs, an excellent banking system, conforming rigidly to the very letter of the Prussian banking laws, and able to pay a slightly

better rate of interest than the German banks. Thus they have sustained themselves under the heavy economic pressure of the state. In 1912, deposits in the co-operative organizations stood at the handsome figure of £46,970,354, as against £12,420,057 in 1900 — an amazing development — while deposits in the Polish banks reached a total of £6,150,000 in 1907, representing a per capita wealth of nearly \$15.

Through the success of these co-operative organizations is reflected that sturdy determination of the Polish peasant to get ahead — an ambition envisioned nearly always in terms of land ownership. Helped by his bank, and willing to assume a debt for land purchase he cannot live mayhap to wipe out — glad to whittle down such a staggering obligation by long years of labor in the industrial regions of Western Germany (Westphalia) separated from his family perhaps eight or ten years at a time, he was rapidly making his laborious goal, economic independence. Whereas the Prussian State expended \$170,000,000 to quarter Germans on Polish land, the Poles since 1896 have secured fully 250,000 acres of land from the Germans, and in May of 1903 the Prussian Minister of Finance, Herr von Rheinbaben, complained that in fifteen years the German population in Prussia diminished by 630,000, while in five years as many as 300,000 Polish immigrants had settled there! Von Bülow himself finally admitted that the scheme for colonization had failed owing to the fact that the German was apt to lose his nationality if not continually subsidized by the state, or even in spite of such support, since he was always ready to dispose of his land for a good figure, whereas the Pole “thought it shameful to sell land to the Germans” and “held fast to the land.”

Under these hard circumstances, the Prussian Poles, faithful to human nature, have become the most Polish of the Poles. They have benefited greatly from the rigid disciplining of their stern masters, and now, chastened in temper, steadfast, thrifty and aggressive, they have their reward: leadership in the new Poland must devolve on them — an amazing retribution for Prussia!

| This new Poland has come into being to-day by processes which it is not possible to follow carefully now, through want of information on the one hand, and lack of comprehension of such reports as are forthcoming on the other. Therefore, a bare outline of what appear to be the principle events in the intricate story must suffice here.

Despite the fact that from the outbreak of the war a bewildering number of forces as well within the old Poland as over the rest of the world — National Committees, Democratic Congresses, Armed Legions,

Polish Bureaus, and the like — concentrated on the great objective, Polish union and independence, the career of one man from 1914 to this moment lends a remarkable coherence to the entire process. And thus featuring in this great crisis in her history, the activity of Joseph Pilsudski, Poland plays true to her great past in the narrative of which lie revealed the beloved achievements of other national heroes like Sobieski and Kosciusko.

Born at Vilna, in 1867, of noble Lithuanian-Polish stock, young Pilsudski, while a student of medicine at the University of Kharkov, became intensely interested in the social problems of Russian Poland — too keenly interested indeed to suit the ever watchful, suspicious Russian police who in 1888 sent the vehement young fellow to Siberia. Returned to his native land after five years of banishment, an aggressive socialist, Pilsudski aided in the organization of that party among his countrymen. Constrained always to dodge the police, now by so desperate a ruse as feigned insanity — a policy bringing him a year's sojourn in a mad-house — now by flight to England — he busily developed his program: armed revolution against Czarist Russia. Efforts to further Polish independence in this wise, like those abortive movements at the time of the Russo-Japanese war, failed through inadequate support and the opposing strength of a better organized party intensely hostile to the Socialists, the National Democrats.

Whereas Pilsudski's group — working-men, for the most part, are described at that time (1904-1906) as more socialistic than national, with a hatred for the Polish capitalistic, landholding element, akin to their abhorrence of Russian autocracy, and with small respect for the Church, the National Democrats, on the other hand, representing landholders, bourgeoisie, peasants, and like their opponents with a scattering of intellectuals, were strongly national, but pro-Russian, with the hope of securing an autonomous Poland.

This latter party, able, after the Revolutionary crisis following the war with Japan, to control the Polish seats in the Duma, made his home land too warm for Pilsudski, who forthwith migrated to that stamping ground for disaffected Poles of all persuasions, Galicia. Here through his organization of the Polish Legions, subsequently so famous, this persevering patriot continued his revolutionary work. An original group of these Legionaries, some 400 strong, mostly Russian Poles of strongly anti-Russian sympathy, created a tremendous sensation, when, in August, 1914, they boldly sallied across the Russian border. From that time on, the Legions, supported by representatives of all Polish

parties in Galicia, and by many Russian Poles, through an organization known as the Supreme National Committee, made an attractive appeal to all Polish patriots, even to the National Democrats, in whose hearts the war had stirred vast hopes of independence.

The Central Powers were only too glad to work hand in hand with the Legions, whose leaders, like Pilsudski, saw in such an unholy alliance but opportunist means to a noble end. Russia appeared to them to be the great enemy. Once get her out of the way, then were there time enough to grapple with the next obstacle to Polish Independence. Behold this arch-patriot then, become a Brigadier-General by order of the venerable Franz Joseph; his Legions enrolled in the armies of the Central Powers, all fighting the while, like tigers, winning iron crosses with the best of them, in that hideous surging see-saw of those vast hordes of men back and forth across Poland, ultimately establishing German control over the devastated land in the fall of 1915.

Upon this success, Pilsudski became restless, anxious to secure assurance of a free-Poland from the triumphant Central Powers. Therefore, when the armies of the Central Powers were facing Brusilow's offensive in 1916, Pilsudski played a bold stroke. His purpose to resign his command being thwarted by Austria's refusal to accept the resignation, at a critical juncture he simply withdrew from the front with an entire brigade. While this act cost him considerable prestige, it did precipitate a crisis which was probably the greatest factor in forcing the Central Powers to issue their decree of November 4, 1916, proclaiming with flourish an independent Poland.

The manifesto was read in the Royal Palace at Warsaw on November 5, by Governor General von Beseler "in soldierly ringing tones," and then was re-read in Polish, by the Palace Commandant, Count Hutten-Czapski. This act proclaimed that Russian Poland was to be a National State in the form of an Hereditary Monarchy with a constitutional government. For the time being, the Central Powers were to administer the new State, pending the gradual development of her proper public institutions. Careful determination of the frontiers also could only come later. Subsequently a provisional government was set up. Its principal organs were an all-Polish Council of State of twenty-five members, which in turn nominated an Executive Committee, the members of which had ministerial functions. Pilsudski had a seat on the minority Left in the Council, and also presided over the Army Committee.

This regime was at best a makeshift arrangement, but, even so, it endured too long to suit Pilsudski. Ordered to develop a Polish army to fight with the Central Powers, the General refused unless he could receive assurances that such an army would operate under the direction of a real National Polish Government. This was a mean impasse, and when the Central Powers failed to yield his point, Pilsudski used his popularity with his countrymen to hinder the formation of a Polish army.

Then came the Russian Revolution, with *its* recognition of an Independent Poland. Here at length was a capital opportunity to strike. Under Pilsudski's supervision an ultimatum was addressed to the Central Powers by the Polish Council of State. Unfortunately, however, his colleagues on the Council were not of their leader's fibre, and unable to co-operate with them, he and the Left resigned. Next, as another step against furthering the interests of the Central Powers, Pilsudski began to disband his Legions. Nearly four-fifths of their members refused to take the oath exacted from them by the Austro-German governments. This was rebellion. The disaffected Legionaries, therefore, were interned, and Pilsudski, himself, was sent a prisoner to Magdeburg.

So the situation stood near the middle of 1917. In September of that same year, it is asserted that Austria sent Polish troops raised ostensibly for a home army to the Italian front, whereupon the Polish Council of State resigned. Then by another decree (September 12) the Austro-German rulers promulgated a new constitution for Poland. According to this instrument the principal organ of government was a Council of Regency, whose personnel of three was appointed by the Central Powers; this body had certain legislative functions; its decrees were to be countersigned by a Premier likewise under the control of the Central Empires; with the Regency were to operate a Cabinet and a Council of State.

Meanwhile other forces were beginning to effect developments in Poland. In March, 1915, Sir Edward Grey had proclaimed to the world one of England's ideals in these words: "We wish the nations of Europe to be free to live their independent lives, working out their own forms of government for themselves, and their own development, whether they be great states or small states, in full liberty — that is our ideal." The Allies, however, so far as they had a distinct Polish policy, shaped it perforce with reference to their great eastern member. Thus, for example, France had a secret agreement with Russia which recognized Russia's "complete liberty in establishing her western frontier." Therefore Russia's open declaration proclaiming an autonomus Poland, issued

by the Grand Duke Nicholas shortly after the beginning of the war, stood as the manifesto of Entente agreement as to Poland's future down to the time of Russia's collapse.

After the Russian debacle it was necessary for the Entente Powers to state anew their attitude towards Poland, and on January 8, 1918, in his address to Congress embodying the ever famous "fourteen points," Mr. Wilson affirmed as his 13th article in a real peace program that "An independent Polish State should be erected which should include the territory inhabited by indisputably Polish populations, which should be assured a free and secure access to the sea, and whose social and economic independence and territorial integrity should be guaranteed by international agreement." The clearest definition of a real future status vouchsafed to the Poles up to that date! The declaration of Allied representatives at Versailles, on June 3, 1918, in favor of "a free and independent Poland with access to the sea" demonstrated substantial unanimity of intent among all the Entente Powers. These manifestos had, all of them, a powerful reaction in Poland.

On June 26, M. Swiezuski, representing three-fourths of the elected members of the Warsaw Council of State, and the "overwhelming majority of Poles" addressed the council on behalf of the Inter-Party Club, concerning the Versailles declaration:

"At the same time," said he, "when the entire world has recognized the Polish question as an international problem and the Polish national and political aims as just, and their realization as a condition of the new order of the world, an order based on right and liberty; at the time when the solemn declaration [that of the Allies] by responsible statesmen has given these aims positive and collective expression — at this moment nothing has taken place on Polish territory to show that the powers which have to-day the practical possibility of confirming their promises by deeds are guided by a real intention of restoring the Polish State."

Subsequently the Inter-Party Club published the following declaration: "Taking into consideration the declaration made after the meeting of the Prime Ministers of France, England, and Italy . . . the undersigned parties belonging to the Inter-Party Club declare that the above statement will meet with a sincere response in the souls of the Polish Nation, the Nation which during more than a century of slavery has always longed for the restoration of Poland (censor) independent and united (censor)."

Indeed it was but a short step in this humor, (and one must remember the perilous condition of the Central Powers at the time) to the demands made by the Poles at a conference at German Headquarters in August, 1918, including a change in the administration, cessation of the joint Austro-German control of the country, recognition of certain territorial claims in Lithuania, access for Poland to the Baltic via Danzig, and the like. This outspoken bid for independence, was presently followed by the demand itself emanating from the Regency Council, that the new

state must embrace all the territory inhabited by Poles. Subsequently a separate manifesto, on October 13, by the Prussian Poles asserted that "nothing but the union into one State of all peoples living in Polish lands, a State which shall possess full rights, can guarantee a lasting League of Nations."

Such was the tense state of affairs when the collapse of the Central Powers shook the world. From then on developments moved rapidly in Poland, the three sections of which were now working practically together. Pilsudski was released in Germany. Frail, nervous, bent with ill health, but with all the old indomitable energy, he hastened back to Poland where he refused to co-operate as Minister of War in a weak Government of the National Democrats hastily formed by the Regents. Soon afterwards that ephemeral creation fell, and the Regency Council through two decrees of November 11 and 14, 1918, pronounced the dissolution of its own body, and "in view of the threatening dangers from within and without" transferred the sovereign power to Pilsudski, his dictatorship to endure until a National Government could be formed.

The excellent temper of the now all-powerful patriot may be judged from his own statement to the people issued likewise on November 14, upon the assumption of his great responsibility — "Upon my return from Germany," this frank manifesto reads, "I found the country in a most chaotic state in the face of exceedingly difficult tasks, for the performance of which the nation must reveal its best organizing abilities. In my conversations with the representatives of almost all the political parties in Poland, I found to my delight that the great majority share my opinion that the new Government should not only rest on democratic foundations, but be composed in a considerable porportion of representatives of the rural and urban masses. . . ."

The new Cabinet, set up under the direction of Andrew Moraczewski as Premier was described by Moraczewski himself towards the end of December, 1918, as ". . . a truly national one," but in almost flat contradiction to this statement stand the assertions of many Poles, and others apparently in a position to know, that the new regime was decidedly Socialistic. However this all may have been, Pilsudski presently faced a grievous difficulty on the score of his government's composition. At eleven o'clock on the night of January 1, 1919, Ignace Jan Paderewski, renowned the world over as the greatest living pianist, and also more recently known as a vigorous Polish patriot, arrived in Warsaw. According to the press dispatches Paderewski upon his

arrival was greeted with wild enthusiasm. The newspapers expressed the hope that he would be able to strengthen the patriotic elements in Poland and "undo the efforts of those who have been working towards disorder." "The *Maire* predicts that his arrival will precipitate certain changes in the Ministry which the Conservatives desire, so that they may secure full recognition from the Allies."

As a matter of fact, Paderewski represented a powerful element among the Poles — the Conservative, or National Democratic group. The principal organ of this party after the establishment of German control over Russian Poland was the so-called Polish National Committee at Paris, under the Presidency of M. Roman Dmowski, a powerful and in many respects a very able man.

The energetic efforts of this Committee in the Allied capitals and at Washington, in the summer and fall of 1918, secured from the Allies and from the United States recognition of the Polish National army, under the supreme political authority of the Polish National Committee as an associated force, co-belligerent, the product of a belligerent State, acts again, which aroused high enthusiasm among Poles everywhere.

What, however, of Paderewski? All in America to-day know his zeal on behalf of a beloved cause — united and free Poland. A remarkable series of "benefit concerts," interspersed with eloquent addresses, and the writing and publication of excellent articles—these activities, together with the expenditure of his personal fortune, bear true witness to a sincere devotion on behalf of this lofty ideal. After more than three years of such yeoman's service, Paderewski left America, on November 23, 1918, for England, arriving at Warsaw, finally, as observed, on New Year's Day, 1919.

He himself declares that he carried with him a power of attorney to act for all the Polish Committees in the United States, representing some 4,000,000 Poles, also that he was empowered to make loans to the Polish Government. It is alleged, furthermore, that full authority was conferred upon him by Austrian and Prussian Poles "through legally organized organs of Polish opinion which had been created by regularly appointed delegate conventions in both territories" to speak and act for them, and that he bore messages from the Allies to the effect that the Pilsudski Government was not to be recognized, as it represented less than one-tenth of the people.

Despite such powerful assets, however, the accomplishment of Paderewski's purpose, namely the organization of a coalition Government in Poland which should be more broadly representative of all



parties there, was a difficult task. Both of the great leaders were apparently suspicious of each other's motives; Pilsudski, too, was fearful lest any readjustment of the government at such a critical time should precipitate a revolution. Unfortunately a *modus vivendi* was not expedited by an abortive attempt on the part of Conservatives and Liberals, under the leadership of Count Eustache Sapieha, to overthrow the Pilsudski regime by force, on January 5: a hazardous undertaking at best, and entirely thwarted by the loyalty of the troops, with ludicrous and very disconcerting developments for the perpetrators.

And then, just as the Journalistic Prophets everywhere were getting up a lachrymose unison "We told you so" — the horizon cleared. After all, on the deeper issue — an independent, united Poland — both patriots were agreed; the threatening dangers to the nascent State likewise urged compromise, which both Pilsudski and Paderewski say they desired. Therefore, about the middle of January, Paderewski's plan for the formation of a new Ministry, representing Russian, Prussian, and Austrian Poland, began to materialize. In fact, Pilsudski signed an agreement to reorganize the Government at midnight on January 16, while the new Ministry, then in formation, was definitely announced on January 19, Paderewski being the Premier and holding the portfolio for foreign affairs, while Pilsudski remained still "head" of the Nation and Commander-in-Chief of the army.

Complete recognition of this new provisional Government by the United States was officially announced on January 22, this brisk act being re-inforced by a similar Allied pronouncement on February 21. Meanwhile, the elections for a Polish Constituent Assembly, held late in January, gave Paderewski's party a considerable victory, the National Democrats claiming ninety-one seats out of two hundred odd in the first meeting of the Assembly, held February 9.

Such, then, is the coalition Government in Poland which is now grappling with a great round of decidedly baffling and dangerous problems, intensely interesting, but too detailed and intricate for even survey consideration here. Among these problems, however, the question of new Poland's frontiers, while all told the most perplexing, is of such vast importance to the entire world, as well as to Poland, that a brief consideration of its principal features is essential in concluding this narrative.

It is not difficult to ascertain the desires of leading Poles everywhere, in regard to this all-important matter; they have expressed themselves fully; and to the great jeopardy of their best interests, forces among

them have gone out to secure what they desire, quite on their own advices, it appears. Even before the armistice was signed, Poles and Ruthenians flew to arms over the disposition of Lemberg and Eastern Galicia, and they are still fighting. Since November 11, the world at large has been following sympathetically, or with irate disapproval, the alternate advance and retreat of Polish forces at all points of the compass about their distracted land, not only in bitter contest with Germans in the Prussian Polish provinces of East Prussia, Posen, and Silesia, to the north and northwest, and in Lithuania to the northeast, but also with the newly liberated Czecho-Slovaks on their southwestern border, where the tiny region of Teschen, with its coal fields, is in hot dispute between the two peoples. There is also conflict with Bolshevik Russians wherever the two encounter, and under cover of this Red bugaboo, new Poland announces that at the request of the President of the new Lithuanian Republic, Poland has taken over "provisionally" the administration of Lithuania.

Thus the impetuous energy of the Poles forges a fiery circuit of Mars about them welded complete and fast but for that uncongenial segment in the due north — the Baltic Sea! And for the most part this militant aggressiveness is on behalf of that "large, strong Poland," economically independent, capable of sustaining the powerful forces which must in future be brought to bear on a buffer state so strategically placed — nay, in the magnified imaginations of the truly far-visioned, a state virile enough to assume henceforth great Russia's mighty rôle as leader of the-Slavic peoples!

More specifically, what of the New Poland as the now dominant party group would have it? Paderewski himself expresses the opinion of a very large number of his fellow-countrymen when he writes as follows:—"The interests of peace require a large, powerful, and economically independent Poland. This can be attained through a complete union of all provinces once belonging to the Polish crown. Only a Poland with access to the sea through Danzig will be able to maintain direct relations with England, France, and America. . . . And only with the mines of Silesia, her ancient province, will Poland be able to acquire economic independence of Germany, to support her surplus population, and to check excessive emigration. . . . A New Poland should be a continuation of that which she has been, otherwise she cannot find again the ideal which she has in her own soul. If one should plan to cut out a certain part of the former Poland to make a new one, if instead of erasing the artificial confines, one should only modify their

direction, it would be creating irredentism which would fatally lead to a new crisis. If we are to have a lasting and durable peace, we must reunite in the New Poland all the Polish land."

Can such a Poland as is here envisioned be re-established? Emphatically no! Not if the now classic norm of President Wilson be used as the gauge in rehabilitation. Founded strictly on the basis of massed majority Polish population the New Poland would constitute a country roughly one-third the size of Poland at the time of the first partition. Or, in terms of Russian-Prussian-Austrian political geography, such a new State of Poland would include the so-called Congress Kingdom of Poland, Russian since 1815, Western Galicia and a small part of Silesia, formerly Austrian, together with territory formerly Prussian — the southern part of East Prussia, a considerable area, the heart of West Prussia (but without the land about the mouth of the Vistula, consequently without Danzig), by far the largest part of Posen, and a section of upper Silesia. This more modest Poland would not include any such large number of other nationals as Paderewski's state must control if it were established, all of which aliens are determined to be independent, and strong enough to breed a considerable amount of trouble if their desires for separate statehood are thwarted.

Furthermore, the re-establishment of an indisputably Polish Poland will be difficult enough to erect and maintain. One resultant alone, the separation of German East Prussia from the mother country, presents a very grave menace for the future — to say nothing of the threat involved in the violent German opposition to the loss of any Prussian territory whatever, Polish or not. Paderewski calls East Prussia the centre and stronghold of Hohenzollern support, and tho it is German he says, "... to lop this limb from the German body-politic, would be a political surgery of the highest order. Until that major operation is performed, we can hardly hope to witness any true democratization of the German system." He proposes to perform this operation by uniting West Prussia together with Danzig to Poland, and suggests several proposals for the future status of isolated East Prussia. It might be erected into a small independent Republic, "connected to Poland by a customs union, and amply safe-guarded as to its administrative integrity," or it might be united to Poland on the basis of home rule.

What an assumption of inordinate responsibility for Poland this solution of the problem would involve! Paderewski, with all respect for his great enthusiasm, fails to recollect that under the best of cir-

cumstances 75,000,000 Germans versus 22,000,000 Poles may become a most sinister ratio!

Finally, in view of these considerations, what shall be said for the mounting ambitions of the Polish leaders, surely not desirable in their entirety? Indeed their glorious vision of a mighty Poland is very comprehensible. A proud race, capable of the best achievement, so long submerged, has turned the while for solace and bright hope's sake to an ardent study of its ancient, more auspicious past. Polish leaders well know what old Poland was. How can the new-born State be less than the old!

This sentimental force is obviously strong in their calculations; but these are shaped again, and colored by many other forces, less worthy perhaps, but vigorously insistent, notwithstanding. Since the partitions all the Poles built up instinctively a powerful strength of opposition against their oppressors; suddenly the dominant alien Governments are crashed down, and forthwith the unrestrained tide of long-pent Polish rancor breaks like a devastating flood sweeping all before it, and scarce to be checked.

Again, Polish patriots, without exception, declare that they face in their country "black with famine and utter destruction" the near and constant menace of Bolshevism, a terror to them all with their vehement Catholicism and their peasant lust for land ownership; this real danger from their point of view seems to them to warrant the large armies and the Allied support which they so insistently demand.

Lastly, purely selfish interests play also their lusty rôle. Wealthy Polish landlords in Lithuania and East Galicia, heretofore the dominant class in a peasant population, see with dismay their all on the brink of ruin in the developing independence of these regions.

Surely when these elemental currents are sounded, and it is borne in mind that by no means all of the Poles are carried away by them, unthought, harsh criticism of this truly great but threatened and bewildered people dies on the lips. Poland to-day, like all of the new-born nations of Europe, must have the unselfish support and firm guidance of a sympathetic world. Only a true League of Nations can guarantee her that beneficent future of which her peculiar genius is so eminently deserving!

In this paper free use has been made of materials taken chiefly from the following sources:—New York Times, London Times, The New Europe and Current History (documents and articles) the British magazines, especially the excellent articles by O. de L. in The Contemporary and by J. E. Baker in the Nineteenth Century, and modern books on Poland like the compact little volume by W. A. Phillips in the Home University Library.

The  
AIMS and CLAIMS of GERMANY

By DAVID KINLEY

PUBLISHED BY THE  
COLLEGE OF AGRICULTURE  
FEBRUARY, 1918

The following address was delivered by Dr. David Kinley, Vice-President of the University of Illinois, upon the occasion of the War Conference called at the University by the State Council of Defense, the Corn Growers' and Stockmen's Convention, and the College of Agriculture, for the purpose of discussing the relations of the farmer to the war and arranging a program of production to be recommended to the state.

January 31, 1918

# THE AIMS AND CLAIMS OF GERMANY

By DAVID KINLEY

Three times since western civilization was established has it been in danger of overthrow and its light in danger of being blotted out under the attacks of more barbaric social orders. The first was by the invasion of the Huns who, in the fourth century after Christ, appeared on the eastern borders of Europe and drove the inhabitants in thousands across the Danube. Pushing westwards they later crossed the Rhine. All that had been accomplished by Roman civilization in the west was endangered; but, in the providence of God, the embattled armies of the Goths and Romans combined, on the plains of Châlons in France, overthrew the Hunnish army of 700,000 and turned back the deluge of barbarism. The second great crisis in the life of that civilization of which we are the heirs occurred when the Saracens, after a wonderful career of victory, established the banner of Mohammedanism through all Western Asia and Northern Africa and finally carried it across the Straits of Gibraltar with the avowed purpose that the Crescent which they bore was to float over a Universal Empire built upon the ruins of Christendom. "The dream of Mithridates and of Caesar was to be realized in the actual achievements of the lieutenants of the Caliphs. The Saracen chief now upon the soil of Gaul was to subjugate the Franks and their confederates, cross the Rhine and crush the tribes beyond that stream, and then follow down the course of the Danube to its mouth. Upon the shores of the Hellespont the bands of the Faithful were to join hands and together give thanks to Allah for the conquest of the World." But in 732 A. D. the heirs of the civilization of the Roman Empire, the defenders of progress and of Christianity, met the Moslems on the battlefield of Tours and, after a seven days' terrific conflict, delivered the civilization of Europe from a danger which had not threatened it since the invasion of Attila and his Huns.

Today a plan of conquest for the domination of Europe, as the first step towards the domination of the world, very similar to that of the Saracens, has endangered once more the progress of centuries of civilization. The ultimate aim of the German Empire in the present war is no less the conquest of the world than was the ultimate aim of the Saracens. In the intervals between these great crises men and nations have fought for various causes. They have warred for creeds, for commerce, for land, for prestige, and for no reason at all except the bidding of princes and kings; but never before in the history of the modern world has any nation, any people, any government, deliberately set about the destruction of their fellow peoples, fellow nations, fellow governments, for the purpose of crushing out their separate national existences, on the theory that all people but themselves were inferior races deserving only extinction or complete subordination. That this is the purpose and spirit of the German nation as avowed by its Government and its leaders in literature, education and public life, we find abundant evidence from their own testimony, to which I shall shortly advert. But before doing so it will help us to inquire somewhat into the character and growth of a government which, in the twentieth century, could precipitate upon the world so great a danger and avow itself an agent of Almighty God to destroy all that other peoples have accomplished and other civilizations have achieved.

For centuries the land that is now Germany had been torn asunder by constant dissensions and wars among the princes and small groups of people which formed the various duchies and kingdoms that made up the so-called Holy Roman Empire after imperial Rome had lost her grip upon the rest of Europe. Through generations there existed a longing among these peoples, frequently expressed in their literature, for a combination or union into one great country. The unity of Germany was a dream for the realization of which every patriotic German worked and prayed. But rivalries and disputes, due to one cause and another, delayed the realization of the dream until the middle of the 19th century. For a hundred years or more the military power of Prussia, the most powerful of the



separate German states, had been growing and it was with this as a tool that the project was finally accomplished. After Bismarck became prime minister of Prussia in 1862 a definite policy of militarizing the whole Prussian nation was adopted and thereby an army created which, when the time came, would be effective for the purposes of Bismarck and his master, King William. Cynical and unscrupulous, recognizing no law nor right of God or man that stood in the way of his purposes, using cajolery, treachery or force as suited the occasion, Bismarck, first appealing to the ambitions of Austria, made war on Denmark and took from her the provinces of Schleswig-Holstein which Germany has retained ever since. Then he quarrelled with Austria over the spoils, made war upon his late ally, and inflicted upon her a humiliating defeat which deprived her of all influence over the German states and left Prussia their acknowledged leader. Four years later, in 1870, he struck at France and took from her the two provinces of Alsace and Lorraine, together with an indemnity of about one billion dollars with which to strengthen and improve the German military machine. Aside from aversion to the methods, or some of the methods, employed by Bismarck to accomplish his purposes, the civilized world at large sympathized with the German people in their desire for national unity. No one appreciated the deep laid plan of the master-hand of blood and iron and his coadjutors whereby these preliminary conquests and this accomplished national unity were to be made but stepping-stones to larger conquests and wider domination.

The thirty years which succeeded the Franco-Prussian war were utilized to develop the military system which made Germany the foremost military power in the world. Meantime, the Government of the Empire set about devising conditions of social and economic life which would remove internal agitation and develop the Empire industrially and commercially. The progress of Germany became the wonder of the world. In industry and trade, in literature and education, in military growth and civil administration she assumed to take the place of leadership and was acknowledged as leader not only in these

matters, not only among the peoples of Europe, who feared to cross her will, but by thousands of our own people who, too busy to look below the surface, or too shallow in their appreciation of German political philosophy and its goal, preached and taught for years the doctrines of German superiority and German efficiency.

American students and American university professors went for higher education to Germany, and without realizing the trend of the philosophical ideas which underlay the education they received, came back in scores and hundreds to spread the story of German efficiency and intellectual progress. Some of them were slavish followers of the doctrines of their teachers, and have been unable ever to rid themselves of the imperialistic point of view which they acquired at these German seats of learning. They have unconsciously spread doctrines that are pernicious in a democracy. They have urged the adoption of German methods, standards and plans, apparently without any consciousness of the fact that these methods and plans were adopted in Germany for the sake of furthering certain purposes which have no place in the life of a democratic people. They have become in many cases apologists for things German, even some of the worst things that have disgraced humanity in the present war. They have become centers of influence for the promotion of German *Kultur* in university classrooms, in the school room and in the press. They have gone so far in some cases as to be, whether purposely or not, agents of the propaganda of German *Kultur*. Some of them have made themselves ridiculous by publishing works trying to establish the doctrine that everything of importance in the United States had a German origin; that some of the greatest writers in English literature and philosophy were indebted exclusively to Germans for their inspiration and their principal doctrines; that, in short, the roots of all that is good among the English-speaking peoples, and indeed, among others, lead back to German sources.

The doctrine of efficiency has been much preached of late years, and German example in this respect has been held up

for the world to follow. We must remember, however, that efficiency, after all, is a relative matter. Efficiency is desirable only if its purpose is approvable. Efficiency, or perfection in the performance of a given act, is worth while only if the act is worth while. To make a thief efficient is not a good thing. To be an efficient liar, or robber, or murderer is not a good thing. Now it is true that in industry and trade, in the art of war and the machinery of education, as well as in other lines, the German people in the past two generations have attained, in some respects, a greater perfection or efficiency than most of the rest of the world. They have done so, however, because they have been bending all their energies for a definite specific purpose: preparation for war. Any people could become efficient if they devoted themselves to a particular end for a long enough time. The rest of the world has thought other things better worth while. Moreover, this efficiency about which we talk so much has proven, after all, a broken reed. In less than four years since the outbreak of the war the nations which the German Government regarded as peculiarly inefficient in military matters have beaten Germany at her own game. In the supply of munitions, in the command of the air, in the command of the sea, in the art of trench making and keeping, in the number and power of great guns, in the use of that devil's device, poisonous gas, and in nearly every other respect, the military technique of the Germans has been attained and surpassed by the French and British. In the so-called chemical industries, of which it was supposed that Germany had an unconquerable monopoly, especially in such matters as the manufacture of dyes and certain kinds of glass, both the British and we have already put ourselves in a position to supply our own wants. In other words, we have not done these things hitherto, because we had other things of more importance to do. As soon as it was necessary for us to turn our attention to these we did them. There is now no dye of importance formerly imported from Germany, that we are not making. We have the secrets of more kinds of optical glass than Germany ever made. The same is true in other lines. The hollowness of the whole organization could

not have been better shown than by the rapidity with which the rest of the world has adapted itself to the conditions forced upon it by this long-conceived and slowly-worked-out plan for military ascendancy.

For education, art, religion, industry, trade, philosophy, public administration, all have been directed to the attainment of that end—the perfection of military power. German military methods became the standard for the armies of other nations. The world watched and did not understand that the awful engine of war was constructed for the purpose of terrorizing and dominating the world. Few saw clearly and fewer still believed. But it is evident now that it was all part of a deliberate plan of preparation for a war which it was believed would establish German supremacy over a beaten, mutilated, murdered world. Briefly put, the present war was begun by the German Government in order to effectuate a third in a series of steps planned since the days of Bismarck. The first was the accomplishment of German unity; the second the creation of the strongest military power in Europe; the third, the attainment of a military position sufficiently strong to dominate the world. Men ask, and History will ask, what claims, what defense, does Germany offer in explanation of such a crime.

Some German public men and writers claim that they are engaged in a war of defense, and that the responsibility for the present world catastrophe does not rest on them. It is hardly worth while, in view of all the testimony and evidence that have been published on this matter, to discuss this now. The claim was not advanced until the advance of the German army was checked. It may be said, however, that there are few incidents in history for which the responsibility can be fixed as definitely as can the responsibility for beginning this war. Following Bismarck's policy, the German Government had in its diplomacy always tried to shape events so that it would seem not to be the aggressor. This was the case with Denmark in 1862. It was the case with Austria in 1866. It was the case with France in 1870, Bismarck even going so far as to falsify a telegram in order to make his position more plausible. So in the present case. Germany accepted the murder

of the Austrian Archduke as the opportunity for her to strike at her neighbors and enlarge her power. We know now on German testimony that a conference was held as early as July 5, 1914, at which it was decided that there would be war. We know now as well as we know anything, that the German Government knew and approved beforehand the Austrian ultimatum to Serbia. Germany knew that Russia was unprepared for war, and that France was not fully prepared. She knew that Great Britain was wholly unprepared. That she knew these things we know from the testimony of her own statesmen. The very diplomatic statements made to excuse their conduct in the early days of the war show that they felt that they must strike both Russia and France because Germany was ready and they were not. She herself, as somebody has remarked, was ready to the last cannon, the last reservist, and the last railroad car. In the great mass of diplomatic correspondence between the middle of July and the second of August, 1914, there is not a telegram or a communication of any kind to show that Germany made the slightest effort to secure delay by Austria. In short, Germany not only planned the war but seized the opportune time and planned the stroke.

Some Americans apologizing, before we entered the war, for Germany's action, have assumed to take the high intellectual ground that the great conflict, historically speaking, was inevitable; that it is the inevitable result of the clashing interests of rival peoples. True, the conflict was in a sense inevitable. When a criminal breaks into a man's house at night and is discovered, a conflict is inevitable. When a band of pirates or robbers undertakes to interfere with the livelihood and orderly, peaceable living of honest men, a conflict is inevitable. If, therefore, by this statement it is intended to say that a conflict was inevitable because a group of people in one part of the world were wrongfully planning to attack another group, the statement is correct. If, however, it is intended to mean, as undoubtedly its sponsors have wished it to mean, that the clashing "interests" of the aggressor were morally justifiable, or that the aggressors were unconscious of the iniquity of their claims, or that the so-called inevitableness of the conflict

removes responsibility for it from the shoulders of those who plotted it and started it, the statement is neither correct nor worthy of argument by honest minded men. A conflict has been inevitable whenever in the history of the world brigands, robbers or wild beasts have attacked the peaceful settlements and homes of men who were trying to live their own lives in their own way. As long as courage remains, conflicts under such circumstances will be inevitable. But there is no room in the code of men of honor for an excuse or apology of this kind set up as a defense of the most outrageous violation of the laws of humanity, and the most tremendous transgression of the principles of morality and of national conduct that the world has ever seen.

One argument to justify themselves, advanced by the present leaders of German thought, is that might makes right; that therefore the German nation may possess itself of the possessions of the weaker; and that the moral law which obtains among individuals does not hold as between states, which are, so to speak, beings of a different order of morality. We need not go far to find evidence of the truth of this statement from the mouths of the Germans themselves. For example, we are told by the author of *Gross-Deutschland*, published in 1911, that: "in the good old times it happened that a strong people thrust a weak one out of its ancestral abode by wars of extermination. Today everything goes on peaceably on this wretched earth, and it is those who have profited who are for peace. The little peoples and the remnants of a people have invented a new word—that is international law. In reality it is nothing else than their reckoning on our good-natured stupidity. . . . Room! they must make room! . . . Since we are the stronger the choice will not be difficult."

Again we are told, in a volume published in 1895, that: "Germans alone will govern. . . . They alone will exercise political rights; however, they will condescend so far as to delegate inferior tasks to foreign subjects who live among them." Still again, we are told: "Let no man say every people has a right to its existence, its speech, etc. With this saying in one's mouth one can easily appear civilized, but only

so long as the respective peoples remain separated from one another and do not stand in the way of a mightier one." The writer of this fine piece of ethics goes on to say that if people are not Germanic, and they are essentially aliens to Germanic culture, the only question is: Are they in our way? "If they are," he says, "to spare them would be folly."

We are told that "between states regarded as intelligent beings disputes can be settled only by force." This idea was advanced by Lasson as early as 1868. He was one of the professors of philosophy at the University of Berlin, under whom, doubtless, many American students have sat. He tells us, too, in the same volume, that the state can realize itself only by the destruction of other states, which, logically, can be brought about only by violence.

Of course, in this conflict of states, the German is always the best. Professor Haeckel, whose name was once honored throughout the world, but who has joined the band of degraded intellectuals who have thrown morality, common sense and honesty to the winds, tells us that "One single, highly cultivated, German warrior of those who are, alas, falling in thousands, represents a higher intellectual and moral life value than hundreds of the raw children of nature whom England, France, Russia and Italy oppose to them." The same ethics, or lack of ethics, is shown in the remark of Karl Kuhn, of Charlottenburg, who in philosophical ecstasy exclaims: "Must kultur rear its domes over mountains of corpses, oceans of tears and the death rattle of the conquered? Yes; it must. . . . The might of the conqueror is the highest law before which the conquered must bow."

The state, we are told, need pay no attention to the moral law. As long ago as 1906 the German doctrine was expounded by various writers from whom I quote, as the right of might. "By right of war the right of strange races to migrate into Germanic settlements will be taken away. By right of war the non-Germanic [population] in America and Great Australia must be settled in Africa. . . . By right of war we can send back the useless South American romance peoples and the half-breeds to North Africa."

Again, we are told that "There [in Livonia and Kurland] no other course is open to us but to keep the subject race in as uncivilized a condition as possible, and thus prevent them from becoming a danger to the handful of their conquerors."

In short, the inferior races, and all races are inferior to the German, are to be excluded from political life. Their individuality, their political, their lingual and their moral existence is to be crushed.

At times they have been out-spoken and frank concerning their designs on other countries. Twenty years ago, in 1897, one writer, Bley, told his compatriots: "You cannot talk and sing about an indefensible watch on the Rhine as long as the Dutch and the Swiss do not sing the same tune."

"As for Belgium and Holland," Frymann told us in 1911, "it must be clear to both that this [coming] war will determine their future. As matters in Europe have come to a head one may freely avow that such little states have lost their right to exist. For only that state can make a claim to independence which can make it good, sword in hand." And with shame be it said, there are Americans who have endorsed this doctrine by writing essays to prove that Belgium is economically only an appanage of Germany and should be absorbed.

In 1901 we were told by another German that "Holland must eventually be amalgamated with Germany, as both countries stand and fall together; the same language, ideals and ideas distinguish both peoples, who must be one. . . . But Germany is in the position to dictate terms and to force Holland economically to seek union and absorption." Still again, a distinguished German economist, speaking of Belgium, tells the world that the "destinies of the immortal great nations stand so high that they cannot but have the right, in case of need, to strike every existence that cannot defend themselves, but support themselves shamelessly upon the rivalries of the great."

Under the policy of Bismarck, as I have said, German national unity was achieved through the establishment of the Empire. After that his plan was to consolidate the various German states, promote their unity of interests and ideals, and



to live on good terms with his neighbors. Germany was satisfied with the accomplishment of her unity, and Bismarck's influence was largely and strongly thrown against extra-territorial ambitions. But when the present Emperor came to the throne and forced Bismarck's retirement, a change gradually came over the mind of the German nation. As one writer, Frymann, put it some years ago: "Since Bismarck retired there has been a complete change of public opinion. It is no longer proper to say Germany is satisfied. Our historical development and our economic needs show that we are once more hungry for territory, and this situation compels Germany to follow paths unforeseen by Bismarck."

The ambition of the nation became the domination of Europe, on the ground that they needed more land for their growing population. They proceeded to argue that the land of the world was practically all occupied. Everywhere we go, they tell us, we find that the Englishman has been before us; and, they added, we know that America has begun the same land-grabbing policy, by your seizure of the Philippines, your tutelage of Cuba and Central America. Therefore, they concluded, we must tear the land from the possession of those who have it. A simple illustration will make clear the ethics of this wonderful proposition. In this country, since the adoption of the Constitution until now, there has been abundance of land open to settlement on easy terms, or for nothing. Hundreds of thousands of enterprising citizens have gone in and occupied the land, so that now our population reaches in an unbroken stretch from ocean to ocean. Now there are no more opportunities. The present generation and the next and the next, and all succeeding generations, will be born only to find the land all occupied. They want it, however, as ardently as you wanted, or as your fathers or grandfathers wanted it, when they took up the government patent for the acres that now are yours. What shall we think of a proposition that we who have come later and find the land all occupied, shall now drive you off because we, forsooth, in our opinion, can make a better use of it? Yet this precisely is the proposition of the German Empire.

It became, then, an accepted doctrine of German foreign policy, that neighboring small countries, Belgium, Denmark, Holland and Switzerland should become a part of the German Empire. Their lands were to be seized, whether the people were willing or not. In addition, northern France was to be taken so as to give the German Empire a sea line running from Havre to the east end of Prussia. This perhaps was the first form that their thoughts took,—an empire running therefore from the western boundary of Russia south to Vienna and west to the Atlantic ocean.

For one reason or another obstacles which they could not or dared not try to surmount at the time prevented the early fulfillment of this plan. But one of the remarkable features of German policy is its elasticity. It was possible to accomplish the purpose of domination in some other way. If an empire cannot be established reaching from the Gulf of Riga to the Bay of Biscay, one running from the North Sea to the Persian Gulf, as the world has recently become aware, will serve the purpose as well,—perhaps better! “The territory open to future German expansion,” Professor Hasse tells us, “must extend from the North Sea to the Baltic and the Persian Gulf, absorbing the Netherlands, Luxemburg, Switzerland, the whole basin of the Danube, the Balkan Peninsula and Asia Minor.” So now the phrase “from the North Sea to the Persian Gulf” has become the rallying cry of the Pan-Germans.

But one thing was only a stepping-stone to another. If, in the first murderous onrush of her army in 1914, Germany had succeeded in overrunning all of Belgium, and seizing the northern part of France as far as Havre, or even Dieppe, she would have been content for a time. For such an increase in territory, if she could keep it, would give her the means for strengthening her army and navy for the next onslaught. For rest assured, there is to be a next onslaught, as I will show in another place, unless the world succeeds in destroying German military autocracy. This territory would have served as a stepping-stone for an aggression to realize the dream of an empire to the Persian Gulf, and that in turn would have laid the foundation for a new grip, reaching into Asia, for the con-

trol of India and China. These are avowed purposes, as may be learned from the works of many German writers. Failing for the present to accomplish the seizure of the Atlantic littoral from Antwerp west; check-mated in the dream of "Berlin to Bagdad"; thrown out of the colonial empire which he possessed; the German militarist now turns for enlargement of the Empire by the seizure of Poland and of Russia territory as far as the Gulf of Riga. It makes little difference where the foothold is, so long as it is a larger foothold that will enable him to prepare himself to deliver his next blow with mightier force. "Land, more land," as the cry is expressed by Maximilian Harden, who is now so frequently quoted by pacifist poltroons among our own countrymen who are seeking peace at the expense of principle. Harden was one of the loudest shriekers for blood at the beginning of the war, when prospects seemed favorable to complete German success. Lately he has been advocating what he calls a moderate policy, holding up to his country the moderation of President Wilson and Lloyd-George. Now that he sees that the purposes which he supported cannot be attained he is whining for the best mode of escape.

But the establishment of this European empire was for the purpose of furnishing another stepping-stone on which to stand and dictate to the world. "Germany," we are told by Pastor Lehmann, "is the center of God's plans for the world." "Germany," another tells us, "as the preponderant power in a Great-German league will with this war attain world supremacy." And still again, Nietzsche, writing thirty-three years ago, tells us that "the time for petty politics is past, the next century will bring the struggle for the dominion of the world." It was in keeping with this purpose and plan that the Kaiser declared some years ago to his people: "Our future lies on the sea"; that he and his associates in government planned a great colonial empire. As another German professor tells us, writing some years ago: "If we do not soon acquire new territory a frightful catastrophe is inevitable. It signifies little whether it be in Brazil, in Siberia, in Anatolia, or in South Africa." Anywhere in the world they were ready to seize the

best. They recognized no rights on the part of the existing population. The fact that Germany wanted land gave her a moral right to take it at the expense of the property and lives of its present occupants, or of anybody else. "Let us," says Karl Wagner, "let us bravely organize great forced migrations of the inferior peoples. . . . The inefficient must be hemmed in and at last driven into reserves where they have no room to grow. . . . and where, discouraged and rendered indifferent to the future by the spectacle of the superior energy of their conquerors, they may crawl slowly towards the peaceful death of weary and hopeless senility."

But the dough must be leavened before it can be baked. Therefore Germans must be scattered over the world and wherever possible brought together into localities which will develop a German spirit and German point of view, and secure a dominating influence on the public opinion and politics of the country. Later on these groups will serve admirably as centers around which to organize new colonies under the German flag!

These, then, are the main outlines of the plan of the German autocracy to bring the world into subjection. Can any man understand this plan and fail to see that its attainment would strike at the roots of liberty, free government and democracy everywhere? The insidious influence and power of autocracy would be established in a multitude of centers scattered over the globe, like the suckers on the tentacles of a mighty devilfish, whose body rested on and drew its sustenance and strength from the main part of the autocratic empire. Sensitive to every touch, its body would react to throw its strength wherever there was an opportunity to attach a tentacle, or a sucker on a tentacle, to a new object that it could absorb, and whose life it could destroy. There would be no safety for a freedom-loving people anywhere on the globe, because these tentacles of influence and power would be continually reaching out and constantly growing. No nation, not even our own, would have been able to stand up alone with any assurance of ultimate success against such a power. At any rate, ultimate success by us in such a struggle, when it came,

would have had to be attained at a cost of life, form of government, and all that democracies hold dear, which would have made men pause and ask whether the struggle were worth while.

Laying down as their fundamental and unchallengeable premise that what the Germans want is right, and that since they wish to expand, to seize other people's land and dominate the world, they, as the chosen people of Almighty God, have a right to do it; that no such word as "wrong" can be recognized in their vocabulary; the defendants of the monstrous program of German autocracy make certain claims in their own defense and certain complaints which we will proceed briefly to examine.

Being very scientific, by a perversion of reasoning, they argue that what they call the biological law of life, the right of the fittest to survive, confers upon the strong the right to extirpate the weak. They do not ask who is fittest to survive. They beg the question by taking it for granted that the only being fit to survive is the one endowed with brute strength. They then confuse the exertion of brute force with moral right. In short, in this matter they have followed the custom which runs through all German political and philosophical as well as psychological arguments. They first have made up their minds what they want to establish, and then they interpret the data which they have at hand in such a way as to sustain their point. I have read a good deal of German political and economic literature in the past fifteen years, and have been impressed every time with this fact. They prove what they want to prove, and show either a real indifference to the facts, or a complete failure to realize that they are not on their side.

Concerning the German claim of their right to expand, it may be said, in reply, that no country has ever objected to receiving desirable members of the fatherland who in years past have left her shores. No better citizens of our own country have come from any part of the world than those of German stock. It would have been a great thing for German moral and educational influence to spread over the civilized world through the impress of the character and training of her

sons and daughters. But this was not enough to satisfy the autocratic government of the Empire. Wherever a German goes he must still remain a German, and retain his connections with the home government! The flag must be established and the language spoken wherever Germans go! The right to expansion in this sense is, of course, a right that the world cannot grant.

With reference to the German claim that they are waging a war of defense and not of conquest, it would be laughable if it were not tragic, to see how they have shifted their ground. The utterances of every spokesman of the Teutonic Empire at the outbreak of the war, the literature of Germany for more than a generation, her state of preparedness to wage war, and her utter neglect to attempt to stay the beginning of war, are all evidence that she entered the conflict with a desire, and purpose, and intention, for conquest. To be sure, when she found herself hemmed in and unable to advance further, especially on the western front and, indeed, on the eastern, until the Russian collapse, then we find a change of tone. Through the utterances of her spokesmen now there runs the note of that whine which characterizes them in defeat. Some people "cannot stand the gaff." They lack the spirit of sport.

Germany claims, as she has claimed for a generation, that she has been forced to become a military state, to develop the strongest army in the world in self-defense. "On the one side," she says, "we are threatened with the eruption of the barbarian hordes of Russia; while on the other hostile peoples hem us in. We must always be in a position to defend ourselves." If Germany had developed her military strength only far enough to enable her to repel attacks, the world might take this view and sympathize with this argument, but she went far beyond this. Of the danger of the Russian bogey and French revenge, I shall speak later.

Again, Germany declares that one nation after another has blocked her program of expansion, has kept her from finding her "place in the sun." This tune has been harped on very strongly, especially with reference to Great Britain, largely for consumption in this country. We have been told with an iter-

ation that has become tiresome, that Great Britain was trying to prevent German commercial expansion, and throttle German trade. There is not a scrap of proof in diplomatic correspondence or political history since Germany became an empire that lays a sufficient warrant for such a statement. Great Britain is and has been a free-trade nation. Her ports have been open to the ships of all the world on the same terms as to her own. The ports of her independent colonies have been open to the ships of all the world, including those of the mother-country, on the same terms. All that the Germans had to do was to do the service better and cheaper than the British, and they could have the carrying trade of Canada, Australia or Great Britain herself. The only possible ground for taking any other view is that certain lines of British ships received high pay, which some called subsidies, in return for mail service, in order that the government might be at liberty to take them over as cruisers in event of war. But these so-called subsidies were for a few passenger lines traveling certain routes, and had no reference to the great mass of British shipping. German steamship companies had docks in various parts of the British Empire, including India, as well as in the British Isles themselves. When, however, the German complainants of alleged British monopoly forgot themselves, as they did once in a while, they told the world that Germany was driving British commerce from the seas; that the world over German trade was driving out British. Now both statements could not be true. That is, it could not be true that Great Britain was throttling German commercial expansion and at the same time that German commerce was driving out British all over the world. The truth is that neither statement was correct. British trade during the years when her foreign critics and some of her own renegade people called her a decaying nation, was advancing by leaps and bounds, as statistics will show. So was that of Germany. And no one welcomed the German expansion more frankly and cheerfully than did the statesmen of Great Britain. When Germany was beginning her colonial program in 1884, Mr. Gladstone said: "If Germany is to become a colonizing power all I can say is God

speed her." And Mr. Chamberlain added: "If foreign nations are determined to pursue distant colonial enterprises we have no right to prevent them." In 1911 Sir Edward Grey said the same thing in almost the same words. Similar statements are on record from authoritative British statesmen and publicists with reference to German commerce.

No evidence has ever been produced to show that any one or all of these countries had any designs upon the peaceful development of the German Empire. The Entente Alliance between Great Britain, France and Russia was, on the other hand, a measure entered into as a protection against threatened German aggression. The policy of Germany was to sow dissension among the other states of Europe, keeping them apart while she herself maintained, through the Triple Alliance, a solid barrier of force separating eastern Europe from western.

In order to create prejudice in her favor, German writers have dwelt strongly upon the bogey of navalism, and when militarism has been criticised have immediately brought out this jack-in-the-box to make an impression. Unthinking or prejudiced individuals among ourselves, not fully acquainted with the facts, have been caught by the phrase. The world has objected to German militarism in the sense that it was a mighty military organization, created for the purposes of aggression, and in ways that made its use for aggression not only possible but almost certain. No such statement can be made of the alleged British navalism. Search the history of the past hundred years and you will find that the preponderant British navy has been used not for the subjugation of alien peoples and the imposition of foreign law upon unwilling subjects, but has been engaged in suppressing piracy, in advancing the interests of science, and in no case has been an aggressor. Nor can a great naval power dominate in the same sense that a great military power can do so. For it has been proven over and over again, the latest instance being the Gallipoli campaign, that navies cannot overcome land defenses and military power. But the country which, with a strong navy, backed by a mighty army, is able to effect a landing, can then use its military strength for subjugation. The term "freedom of the seas"



has been used to conjure with, and to attack British policy. But the seas have been open and free, the British navy to the contrary, to the ships of every nation for more than a hundred years. Indeed, they have been open because of the British navy. I have been often puzzled to understand just what the Germans meant by the freedom of the seas. Lately, however, I have run across the explanation. Here it is as recently given in one of our newspapers: "In March, 1917, Count Reventlow explained the phrase at a great meeting in the Berlin Philharmonic Hall. On the authority of the Naval and Military Record of England this bloodthirsty person thus put himself on record: 'What does Germany understand by the freedom of the seas? Of course we do not mean by it the free use of the seas, which is the common privilege of all nations in time of peace, or the right to the open highways of international trade. That sort of freedom of the seas we had before the war. What we understand today by this doctrine,' he continued, 'is that Germany should possess such maritime territories and such naval bases that at the outbreak of war we should be able with our navy reasonably ready, to guarantee ourselves the command of the seas. We want such a jumping-off place for our navy as would give us a fair chance of dominating the seas and of being free on the seas during a war.'"

Again, the Germans have tried to create a prejudice against Great Britain by harping upon the mightiness of the British Empire. They have found it, in their writings and speeches, rotten and ready to fall apart—because that was what they wanted. It was amusing to me when I was in Germany to see the assurance with which the Germans talked of misrule of Great Britain in her colonies, and of the certainty with which these colonies would desert her in her hour of trial. Their conversation and their writings showed that they knew nothing at all about the real facts of the situation. They had listened, as even some in our neighborhood here had listened and taken at one hundred per cent value, the diatribes of a few discontented foreigners. The answer to the criticism that the British Empire should be broken up because it was a tyranny has been found in the glorious response of the Empire in this war.

As I have already said, another claim of the Germans in defense of their program of expansion was that Russia was a menace to her. Slav barbarism threatens to overwhelm us, they said. Our ignorance of real conditions in Russia made it easy for us to believe this. But the claim could be shown to be in large measure untrue. Without, however, entering into the merits of that question, it is sufficient to point out that on this point as on others the German statements were inconsistent. While professing a fear of Slav domination, they constantly expressed contempt for Russia's military strength. They had no reason to fear her if they were not afraid of her army.

At another time it was France that blocked the way of this chosen people of God in their program of robbery and murder. Therefore, France must be punished, and in their phrase "bled white" beyond recovery. I will not insult your intelligence by answering this claim.

Finally, in order that the world and posterity might be satisfied that she was a much abused and deeply wronged nation by all the rest of the world, Germany told us that the United States of America has been in recent years following a policy that blocked her way. "What do you people want with the Philippines?" is the question that was frequently asked of Americans in the days immediately following the Spanish war. Germany went as far as she dared during our Spanish war to impede our operations, and to secure the Philippine Islands for herself. She secured a foothold in the Samoan Islands, and attempted to secure one in Venezuela.

In short, in seeking to attain her aim of world domination Germany has planned to absorb her small neighbors and destroy the British Empire, to inculcate propaganda favorable to herself in every country where her interests could be subserved thereby. She has established agencies for corrupting and undermining public opinion in every country of the globe where her plans could thereby be furthered. She has established through her emigrants in different countries groups strong enough to dominate opinion and action, or to try to set up in time a new state under German Government, as in Brazil. She

has used the gains of every war and every diplomatic struggle as the basis for future aggression. She has permitted nothing to be done in world politics for twenty years without insisting on having her "share," whether she had an interest in the particular matter or not. She shook her mailed fist at Morocco and rattled her sword at Manila. She has insidiously tried to destroy the industrial and commercial plants of other countries, and undermine their economic and social organization. She has stirred up internal dissensions by bribery and the dissemination of falsehoods, and has even gone so far as to stir up foreign enemies against countries which supposed she was their friend.

Not only has the German autocracy thrown the shadow of its sinister designs across the path of the world's progress, but in its immediate methods of carrying out its purposes, it has crucified humanity and has violated every principle of kindness and righteousness. Under the instruction of their military staff, the German army went into Belgium and northern France with the avowed purpose of so terrorizing the inhabitants that the world would be afraid to oppose the Germans. The belief on their part that such was human nature not only casts a reflection on their good sense, but makes one wonder whether they themselves are the kind of people they thought the rest of us were. In their conduct of the war they have defied and broken treaties and international law whenever and wherever it suited their purpose, and they stand today before the judgment bar of God and men as a people forsworn. They have violated every moral principle, in the commission of robbery, murder and rape. Neither age, sex nor condition has been a protection against their violence. Old men, women and even babes in arms—it made no difference, all must be trampled in the march of their glorious army. It would have been bad enough if such conduct had gone only so far as it could be defended reasonably on military grounds, if ever military grounds require such conduct; but no shadow of excuse that will stand the test of a moment's thought can be brought forward that will justify the treatment of Belgium and of northern France. The evidence is abundant and unimpeach-

able. We need not seek the testimony of outsiders. We need rely only on the private diaries of German soldiers and officers, official proclamations and the photographs of the outraged, the dead and the dying.

They have destroyed private property and desolated the country that they have occupied—even while prating about the sacredness of private property at sea! No one who knows them and their program doubts for a moment that this is done in accordance with official plans for the very purpose of making it impossible for a desolated land to be their competitors in the future. "Anybody who knows the present state of things in Belgian industry will agree with me," says Deputy Beumer of the Prussian Diet, "that it must take at least some years—assuming that Belgium is independent at all—before Belgium can even think of competing with us in the world market. And anybody who has traveled, as I have done, through the occupied districts of France, will agree with me that so much damage has been done to industrial property that no one need be a prophet in order to say that it will take more than ten years before we need think of France as a competitor or of the re-establishment of French industry." Here, then, we have the real motive of the utter desolation which the Germans have wrought in the occupied territory.

Again, contrary to international law and the custom of war, for generations, they have resorted to the practices of the Middle Ages by imposing fines on conquered and occupied cities.

They have violated the treaties of generations, the conduct of honorable soldiers, the law of nations, and the tenets of modern civilization by seizing hostages, making them responsible for the acts of other people, and murdering them to suit their pleasure.

They have violated military law by killing unofficial civilians. They have violated military law, international law, their own specific pledges, and the law of humanity, by using civilians, including even women and children, as screens before their advancing soldiers in battle. They have outraged the conscience of the world, violated international agreement and set civilization back, by restoring slavery through the deporta-

tion of defenseless inhabitants of conquered territory, tearing them from their families and transporting them to work in Germany or elsewhere.

Through their piratical submarine attacks they have violated international law, restored piracy and committed murder, even of neutrals on peaceful ships, innocent travelers,—men, women, girls, boys and babes in arms.

They have gone back to the war practices of five centuries ago by their cowardly use of poison gases that inflict the most awful tortures, so that their opponents are more than justified in the moderate criticism which they have made, that the Germans are “not clean fighters.”

They have been guilty of inhumanity and violating law by killing the wounded, by attacking hospitals and Red Cross ambulances, and by attacking undefended cities. They have placed themselves in the same class with the fanatical Turks, by condoning the massacre of Armenians. Do you doubt the truth of these statements? Out of their own mouths again, judge them.

I give a single instance out of many in each case. As to robbery: “After living about a week in a chateau near Liege, His Royal Highness, Prince Eitel Fritz, the Duke of Brunswick, and another nobleman of less importance, had all the dresses that could be found in the wardrobes belonging to the lady of the house and her daughters packed before their own eyes and sent to Germany.”

As to incendiarism: “The village was surrounded and the soldiers posted one yard apart so that no one could escape. Then the Uhlans set fire to the place one house after another. No man, woman or child could possibly escape. Any one trying to escape was shot.”

As to murder, here is one case: “All the villagers fled. The dead were all buried, numbering 60. Among them were many old men and women. . . . . Three children were clasped in each others arms and had died thus.”

As to outrages on women and children, I dare not quote.

As to killing the wounded, I need but recall the order of General Stenger: “No prisoners are to be taken. All prisoners, whether wounded or not, must be slaughtered.”

As to sheltering themselves behind women and others in battle, hear Lieut. Eberlein: "I made them sit on chairs in the middle of the street. . . . The civilians whom they had put in the same way in the middle of the street were killed by French bullets. I saw their dead bodies."

As to killing prisoners, I have already quoted General Stenger.

As to being liars about their conduct, I need not quote. Read almost any statement of their military chiefs or of any pro-German.

As to the deportation of civilians, and the restoration of slavery on a scale unparalleled since the days of the Calmuck Tartars, read the statements of your own Ambassador Gerard and other Americans who were on the ground.

Then as to the general character of their procedure in the conduct of the war, listen to the testimony of one of our own distinguished fellow-citizens, Mr. F. C. Walcott, one of Mr. Hoover's staff in Belgium.

A year ago I went to Poland to learn its facts concerning the remnant of a people that had been decimated by war. The country had been twice devastated. First the Russian army swept through it and then the Germans. Along the roadside from Warsaw to Pinsk, the present firing line 230 miles, near half a million people had died of hunger and cold. The way was strewn with their bones picked clean by the crows. With their usual thrift, the Germans were collecting the larger bones to be milled into fertilizer, but finger and toe bones lay on the ground with the mud covered and rain soaked clothing.

Wicker baskets were scattered along the way—the basket in which the baby swings from the rafters in every peasant home. Every mile there were scores of them, each one telling a death. I started to count, but after a little I had to give it up, there were so many.

That is the desolation one saw along the great road from Warsaw to Pinsk, mile after mile, more than two hundred miles. They told me a million people were made homeless in six weeks of the Ger-

man drive in August and September, 1916. They told me four hundred thousand died on the way.....

In the refugee camps, 300,000 survivors of the flight were gathered by the Germans, members of broken families. They were lodged in jerry-built barracks, scarcely water-proof, unlighted, unwarmed in the dead of winter. Their clothes, where the buttons were lost, were sewed on. There were no conveniences, they had not even been able to wash for weeks. Filth and infection from vermin were spreading. They were famished, their daily ration a cup of soup and a piece of bread as big as my fist.....

.....In that situation, the German commander issued a proclamation. Every able-bodied Pole was bidden to Germany to work. If any refused, let no other Pole give him to eat, not so much as a mouthful, under penalty of German military law.

This is the choice the German Government gives to the conquered Pole, to the husband and father of a starving family: Leave your family to die or survive as the case may be. Leave your country which is destroyed, to work in Germany for its further destruction. If you are obstinate, we shall see that you surely starve.

Staying with his folk, he is doomed and they are not saved; the father and husband can do nothing for them, he only adds to their risk and suffering. Leaving them, he will be cut off from his family, they may never hear from him again nor he from them. Germany will set him to work that a German workman may be released to fight against his own land and people. He shall be lodged in barracks, behind barbed wire entanglements, under armed guard. He shall be scantily fed and his earnings shall be taken from him to pay for his food.

That is the choice which the German Government offers to a proud, sensitive, high-strung people. Death or slavery.

When a Pole gave me that proclamation, I was boiling. But I had to restrain myself. I was practically the only foreign civilian in the country and I wanted to get food to the people. That was what I was there for and I must not for any cause jeopardize

the undertaking. I asked Governor General von Beseler, "Can this be true?"

"Really, I cannot say," he replied, "I have signed so many proclamations; ask General von Kries."

So I asked General von Kries. "General, this is a civilized people. Can this be true?"

"Yes," he said, "it is true"—with an air of adding, "Why not?"

I dared not trust myself to speak; I turned to go. "Wait," he said. And he explained to me how Germany, official Germany, regards the state of subject peoples.

This, then, men and women of America, is, so far, the story. Let us turn back, quietly still, and read a little history.

The writings of many Germans make it clear that the anticipated success in the present war was to be a basis for future action against ourselves. Sixteen years ago a professor of history in the Royal Academy in Posen and the Academy in Berlin, Dr. Hotsch, wrote: "The most dangerous foe of Germany in this generation will prove to be the United States." Lieut. Edelsheim wrote, in 1901: "Operations against the United States of North America must be entirely different. With that country in particular political friction manifest in commercial aims has not been lacking in recent years, and has until now been removed chiefly through acquiescence on our part. However, as this submission has its limit, the question arises as to what means we can develop to carry out our purpose with force in order to combat the encroachments of the United States upon our interests. . . . . If the German invading force were equipped and ready for transporting the moment the battle fleet is dispatched under average conditions, these corps can begin operations on American soil within at least four weeks. . . . . The United States at this time is not in a position to oppose our troops with an army of equal rank. . . . . As a matter of fact, Germany is the only great power which is in a position to conquer the United States."

Still another writer, in 1897, expressed the opinion that "the Monroe doctrine lacks as yet a justification in the unified



character of the people"! Still another tells us: "It is therefore the duty of every one who loves languages to see that the future language spoken in America shall be German."

In 1903 Vollert wrote: "From all this it appears that the Monroe doctrine cannot be justified. . . . And so it remains only what we Europeans almost universally consider it, an impertinence." So distinguished an authority as the economist Schmoller wrote some years ago: "We most desire that at any cost a German country containing some 20 or 30 million Germans may grow up in the coming century in Brazil. . . . Unless our connection with Brazil is always secured by ships of war, and unless Germany is able to exercise pressure there our development is threatened."

Another professor of political economy (Schulze-Gaevernitz) wrote in 1898: "The more Germany is condemned to an attitude of peaceful resistance toward the United States, the more emphatically must she defend her interests in Central and South America where she today occupies an authoritative position. . . . For this purpose we need a fleet capable not only of coping with the miserable forces of South American states but powerful enough if the need should arise to cause Americans to think twice before making any attempt to apply an economic Monroe doctrine in South America. Still again, we are told by another that it depends on the political situation when Germany shall take possession of a harbor in Venezuela. Before doing so, however, this writer tells his fellow-countrymen that they should determine first whether they are to acquiesce in the American order of "hands off in South America."

In 1904 Friedrich Lange asserted that all the republics of South America would accept the advice of the German Government and listen to reason, either voluntarily or under coercion, while two years later another wrote that not only North America but the whole of America must become perhaps the strongest fortress of the Germanic races. This is one of the writers who advocated the sending of people of non-Germanic blood now living in South America to Africa so as to have "a free South America for those of Germanic blood." This was twelve years ago. At about the same time another aspirant for his

country's expansion told the world that Germany would take under her protection the republics of Argentina, Chile, Uruguay and Paraguay, and other parts of South America where Germans had settled predominantly.

Still again, in 1915, Professor Hettner of Heidelberg told his countrymen that in treating with America German public opinion was to some extent lacking in courage. "Just because the United States has set up the Monroe doctrine to exclude Europeans from America it does not follow that we should acquiesce in that doctrine."

Throwing a flood of light on the opinions which I have quoted concerning the attitude of Germany towards the United States, is the story told by Major N. A. Bailey and published in the New York Tribune, August 11, 1915. It is as follows: "At the close of the Spanish-American War, I was returning on the Santee—I think it was—from Santiago, Cuba, to Montauk Point. . . . On board there was a military attaché from Germany, Count von Goetzen, a personal friend of the Kaiser. Apropos of a discussion between Count von Goetzen and myself on the friction between Admiral Dewey and the German Admiral at Manila, von Goetzen said to me: 'About 15 years from now my country will start her great war. She will be in Paris in about two months after the commencement of hostilities. Her move on Paris will be but a step to her real object—the crushing of England. Everything will move like clockwork. We will be prepared and others will not be prepared. I speak of this because of the connection which it will have with your own country. Some months after we finish our work in Europe we will take New York and probably Washington and hold them for some time. We will put your country in its place with reference to Germany. We do not purpose to take any of your territory, but we do intend to take a billion or more dollars from New York and other places. The Monroe doctrine will be taken charge of by us, as we will then have put you in your place, and we will take charge of South America, as far as we want to.'"

Finally, we have to bear in mind the remark of the gentleman who has several times proclaimed that he took his stand

beside his allies in shining armor, the Emperor himself. Ambassador Gerard tells us that in conversation with him the Emperor repeatedly said: "America had better look out after this war," and "I shall stand no nonsense from America after the War."

The sentiments that have been described above have come to the surface on several occasions in the history of the past two decades. The story of the attitude and interference of the German Admiral Diedrichs with the operations of Admiral Dewey and his attempt, without success, to persuade the British Admiral to take the same view, are well known. Yet Chancellor von Bulow, speaking in the Reichstag in 1899 evidently approved the truculent attitude of his Admiral. He said among other things, that the need of Germany for coaling stations was most clearly indicated at the time of the Spanish-American war, and that the introduction in the Reichstag of a bill for the increase of the German navy was justified by the occurrences of the Spanish-American war, the disturbances in Samoa and the war in South Africa.

In connection with the Spanish war, not only did the German Admiral by his actions show contempt for the American fleet, but he gave indirect aid to our enemy; he interfered as far as he dared in an obstructive way in the operations of Dewey's fleet, and tried the patience of our Admiral almost to the breaking point. Later on the same commander in the same cruiser, the *Panther*, slipped into a harbor of Venezuela and endeavored to get a foothold there. German influence has been thrown against the construction and the control of the Panama Canal by ourselves and against the purchase by us of the Danish West India Islands.

In spite of this fearful indictment, in spite of this long series of truculent acts against every people in the world who were imagined by German leaders to stand in their way, we still find some of our people asking why we went into the war! We went in for a variety of reasons.

In the first place, we were called on as one of the leaders of humanity to take a stand in defense of civilization, righteousness and law. When our forefathers published the Decla-

ration of Independence they said that among other reasons for issuing their statement was a decent respect for the opinions of mankind. No such respect has been shown by the German Government in this war, or the incidents that preceded it. Has a man no duty when he sees his neighbor beaten, robbed or murdered? Has a people, a country, a nation no duty to act when it sees the principles for which it stands trampled to the earth; and its neighbors maltreated, robbed and murdered? Has a nation no duty, nay, has a nation no interest to protect, when it sees principles and practices antagonistic to its own existence established in a neighboring community? The answer is given in our own Declaration of Independence when the writers said that one of the causes for rebelling was the attempt of the king of Great Britain to establish in a neighboring province a government that would be inimical to our own. Every principle and precept of humanity, the duty to defend righteousness and law among nations, every interest involved in the maintenance of our own democratic form of government, called us to join in this war.

Again, were we to stand apart when the moral sense of the world was outraged by the murder and oppression of the people of Belgium and northern France? What defense can a man or a nation offer if he stands passive and silently acquiesces in such deeds as the massacre of the Armenians, the Serbians and the Poles, and the enslavement of the Belgians? Is it worthy of a free people to refuse to resent such things as the murder of Edith Cavell, or Captain Fryatt, or the innocent travelers on the Lusitania?

We said we went to war with Spain to free the people of Cuba from tyranny and misery and give them an opportunity to live as freemen. That is a humanitarian motive. Did we lie? If we did not, then such a motive justifies our entry into this war.

But there are more important reasons for our intervention. Our pride and national dignity have been insulted by the system of propoganda which has undertaken to corrupt and undermine our public opinion, to falsify and to destroy our political and moral ideals, to interfere with our industry and

trade by the destruction, at the risk of life, of industrial and other establishments. As a far-seeing people we are called on to interpose ourselves to prevent the growth of an autocratic government to a point of strength where at its leisure and pleasure it can defy that Monroe doctrine which we have regarded as one of the greatest safeguards of liberty in the western hemisphere.

But even more specifically: We were insultingly told that we must not sell munitions of war. Apparently it was the high prerogative of the German nation to do this to any belligerent, but we might not do it if it injured or even displeased the German autocracy. We patiently pleaded our cause, showing the reasons for our action. The German Government tried to stir up internal sentiment against us. She then issued her edicts about shipping. We protested against attacks on neutral ships by submarines and particularly against the sinking of neutral vessels or of any vessel in ways contrary to maritime international law endangering the lives of the crew and passengers. Pretending to acquiesce, the German Government waited for an opportune time, when she had increased the number of her submarines, and then defied the request and the wish of the United States. She sent to an untimely death innocent children and women as well as men, and in too many instances her submarine commanders sank vessels in such a way as to make it almost impossible for passengers or crew to survive. "Sink them so that not a trace will be left behind" seems to have been the order of other representatives of the German Government than the fool who spoke for it in Buenos Aires. "Public policy prompted by the emotions is stupidity. Humanitarian dreams are imbecility. Diplomatic charity begins at home. Statesmanship is business. Right and wrong are notions indispensable in private life. The German people are always right because they number 87,000,000 souls."

But why prolong the horrible story? If in the face of the evidence easily accessible to all, and only part of which I have touched upon, there is any one among us who still is in doubt about the wisdom and necessity of our entering the war, then he would not listen if the country were covered with the in-

vaders and we were experiencing the same ruthlessness that has befallen the people of Belgium, Serbia, Poland, Armenia and France. If any one now does not believe that it has been the set purpose of the imperial German Government to dominate the earth, to destroy democracy and establish autocracy, then he too must be one of those 87 million German people who are always right because they are German.

Therefore, fellow-citizens, in going to Europe to fight side by side with glorious Britain, heroic France and courageous Italy, we are simply defending our own shores, our own lives, our own families. For it is as clear as the sunlight that if German autocracy succeeds in establishing its aims on the continent of Europe, the Republic of America will be the next victim. And if we had not undertaken to stem the rising tide of slavery and terror on the other side of the Atlantic we would have found it necessary to do it on this side alone. It would not have been only the burning of New York, or Boston, or Washington, or Charleston; it would not have been only the imposition of fines and indemnities of billions of dollars; it would not have meant merely the destruction of our property and the robbery of our sustenance; it would have meant the dishonor or the death, or both, of those who are dear to us; it would have meant the destruction of that great national spirit and national organization which has been established and cemented by the blood of our fathers; it would have meant the turning back of the liberty of the individual and the world to the conditions of five centuries ago; it would have meant the blotting out of that spirit of freedom, that spirit of independence, that spirit of duty, that spirit of high idealism, which we like to characterize as American; it would have meant that instead of America's being, as she always has been, the hope of the world, she would take her place among the beaten and degraded and enslaved nations under the heel of an emperor who claims to represent God, and whose shining armor, no longer shining, but begrimed with the blood of the innocent and the weak, is still waving his sword in defiance of law and order and right.

Think about these things. Go home, look at your barns, and remember that if "This Thing" comes to our shores it will be well for you to burn them before the invader does. Look at your crops and your trees. If he reaches our shores cut them down and burn them. It will be better to do that than to let them fall into his hands. Look at your wife and your daughters, and be ready to follow the example of Virginius, in ancient Rome. For it were better that they were dead. Think of the liberty you have enjoyed, and choose to lie dead rather than give it up. Think of the country of which you are a part and which your fathers and yourself have helped to build up, and make up your mind to lay it desolate in universal ruin according to your own way, because if you do not and are beaten it will be done in the invader's way.

To prevent these things is our task. "To such a task," in the words of our great President, "we can dedicate our lives and our fortunes, everything that we are, and everything that we have, with the pride of those who know that the day has come when America is privileged to spend her blood and her might for the principles that gave her birth and happiness and the peace which she has treasured. God helping her, she can do no other."

I see a vision! "I see a drumhead court-martial.<sup>1</sup> I see an English woman, tall, sweet-faced and pale. I see her calm under the lash of words of torment. . . . . I see her led away. . . . . I see her blindfolded as six men with rifles step away. I see the garments torn, exposing her left breast so that they will need no other white mark to reach her heart. I hear a command. I hear a report. A form crumples into a grave, and a soul takes flight to the God that gave it."

But wait. My eye turns back to our own land. A messenger boy with a thin yellow envelope in his hand has just entered a quiet cottage in central Illinois. The messenger leaves. The father and mother sit alone dry eyed and still. By and by the woman, rising, goes to her husband and taking one lapel of his coat in each hand she shakes him fiercely, and

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<sup>1</sup>From "The Cross of Gold," by C. F. Johnson, Twin Falls, Idaho.

says: "John, they have killed my boy in France, and I want you to **DO SOMETHING.**" So when 500,000 more or less are murdered in France, and parents begin to go all over the nation saying "They have killed my boy in France, won't you, and you, and you, do something?" we will plow, and dig, and mine, and nail, and work, and think, and pray and fight. And still the call will ring in our ears: They've killed my boy in France; won't you do something? and, by the Eternal God, we will!







# MOBILIZATION FOR FOOD PRODUCTION

A PLAN FOR

## CIVIL-MILITARY SERVICE

TO INSURE AN ADEQUATE FOOD SUPPLY FOR THE UNITED STATES AND WESTERN EUROPE

Proposed by the University of Illinois

Prepared by the Faculty of the College of Agriculture and the Department of Economics

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This Plan is based upon the following facts:

1. The present production of food in the United States is not increasing in proportion to the increase in population.
2. In going to war, the production of food is our strongest asset, particularly in view of the reduced food production in Canada and in western Europe.
3. The experience of all time indicates that every nation in going to war puts men into active military service without regard to the disturbance of basic industrial conditions, even the production of the food of the people.
4. Indiscriminate enlistment from the farms with no plan for labor replacement is certain to reduce food production below the level of positive need, for we already have two lean years behind us and under present conditions of a hungry world continued shortage may mean disaster.
5. If an adequate food supply is to be assured, *the military plan must include an enlistment for food production as definite as for service at the front.* From the first the Department of War should as rigorously protect the food production as it does any other means of national defense.
6. Anything like limiting the food of the people is wholly unnecessary if reasonable attention be given to the business of production. America has land enough, if it is properly handled, to feed both

herself and western Europe; besides, more men would be required to enforce a police restriction of food than would be required to turn a scarcity into an abundance.

7. For years labor has been deserting the land and building up conditions of employment that the farmer cannot meet, for it is impossible to conduct a farm upon the eight-hour plan and according to union rules. The typical family of five cannot work to the best advantage the typical farm of one hundred and twenty to two hundred and forty acres, and the farmer has reached the limit in the use of machinery and in the employment of his children to replace the hired help that has gone to the city. Any plan to be safe, therefore, must not only make good the enlistment from the country, but *must actually add to the present labor supply of the farmer.*

## DETAIL PROCEDURE

**I. Registration.**—Register every farm operator, whether owner, tenant, or manager, together with the number of acres of tillable land, pasture, and timber; the men he usually employs, including his sons, and the number of men he would need to employ in order to insure maximum crops.

**II. Enlistment.**—Enlist in the Civil-Military Service and under military pay the following classes:

1. Men above military age, especially with farm experience.
2. Men of military age and of good health but either permanently or temporarily unfit for war service at the front.
3. Boys from fifteen to eighteen years of age, whether from the country or from the city.

### III. Training Camp Farms

1. Establish at convenient points on land rented by the government and suitable for intensive farming, military camps where the enlisted men not otherwise employed (see under Employment) may be gathered and housed, such farms to be devoted to the raising of crops requiring a maximum amount of hand labor, such as vegetables, small fruits, cotton, and tobacco.

2. Erect at these centers facilities for drying and canning such food products for preservation and for transportation.

#### IV. Employment

1. On farms: The largest asset for food production is the thousands of farms already organized under the management of experienced farmers, each with an independent business operating thru established channels of trade. Here should go the maximum of the enlisted men, and the camps should be ready at all times to furnish lists of available help, it being understood that men under employment by the farmer are on furlough and off government pay, receiving from the farmer the "going wage" of the locality, dependent upon the work the man or the boy is able to do. All such enlisted men should be reported from time to time as may be required by the military authorities.

It should be understood as a part of the plan that an enlisted man having taken service with a farmer and becoming dissatisfied may return to the camp and the lower wage, or if he is unable to give satisfaction he may be discharged, in which case he must return at once to camp.

2. Enlisted men not employed on private farms should be at the camp farms under military discipline, but under agricultural leadership; such men to devote their first attention to the production of food under the direction of an agricultural leader, chosen in each case for his ability in the particular kind of farming followed at this special camp.

The plan of farming should be such as to afford time for regular military drill for those of military age and below, not only for the welfare of the camp, but in order to afford preparation for such as are going to the front as soon as their age limitations or physical disabilities are removed. In general, men of military age and above without farm experience should be quartered in regions engaged in intensive farming where oversight is possible.

As the camp is depleted by members entering the active military service, its numbers should be systematically replenished by new enlistments.

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Registration or enlistment for Civil-Military Service should be considered as truly patriotic as any service, and such enlistment should be made attractive thru formal recognition, as by uniforms and the use of special organizations, ranks, and degrees of efficiency, even promotion and commissions. Especially is this true for the younger men and boys.



UNIVERSITY OF ILLINOIS

# Agricultural Experiment Station

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URBANA, ILLINOIS, FEBRUARY, 1918

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CIRCULAR No. 210

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## THE FARM MACHINERY SITUATION

By E. A. WHITE<sup>1</sup>

In answer to the call for more food, the citizens of Illinois will plant every square foot of ground possible in 1918. To accomplish this end, farm machinery is a necessity, and it becomes a patriotic duty as never before to give attention to the early purchasing and care of implements. The United States Government has officially recognized the necessity of farm machinery by giving to the raw materials for its manufacture a rating in Class B1, next to the materials for munitions. It now devolves upon us to rise to the occasion and do our "best" to insure that we go into the fields this coming spring mechanically equipped for the great drive.

**An Adequate Supply of Machinery Is Necessary.**—The present labor shortage can be partially offset by an adequate supply of machinery to insure the proper planting, cultivating and harvesting of a large crop. Stock should be taken of the machines on hand, keeping in mind the labor conditions and the crops which should be planted. If there is any possible doubt of a sufficient supply being on hand, take a trip to the dealers and order what may be necessary. Look over new machines, and see if there is not some new implement which could be used to advantage.

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<sup>1</sup>Assistant Professor of Farm Mechanics, College of Agriculture.

**Order New Machines Now.**—If a new machine is needed, purchasing should not be put off until the season opens. *Order it now.* The best authorities agree that prices will not be lower. Transportation is very slow. The dealers, fearing retrenchment on the part of the users, are reluctant to lay in their usual supplies. The purchaser can render a patriotic service by placing his orders early, thereby taking advantage of present prices, relieving the dealer of unnecessary risks, giving the manufacturer an idea of the number of machines required, relieving the transportation situation later in the year, and insuring that the machines will be on hand when needed.

**Order Repairs Now.**—All machines on hand should be gone over and the repair parts which will be needed this next season listed. List not only broken parts and worn parts, but also parts which are known to wear out and break. Take this list to the dealer. If he has the parts on hand, take them home; if not, place an order immediately for the same. Express service can not be relied upon as in the past. Waiting to order until a machine breaks, may prove disastrous.

We should go into the field this coming spring prepared for emergencies. A machine with one part broken is useless. The ordering of repair parts now will insure an adequate supply in the hands of the user, thereby reducing to a minimum the time lost in breakdowns. The home army must be just as thoro and efficient in its work as the army on the firing line; it behooves us to be forehanded.

**Begin Now to Put the Machines in the Best Possible Working Condition.**—Under present conditions neglecting to care properly for farm machinery is certainly unpatriotic. Go over every implement, putting on repair parts, tightening the bolts, and replacing wooden parts which are worn out. Sharpen all soil-preparation machines, such as plows, disk harrows, and spike-toothed harrows. Give the cultivators an overhauling. Put the mowers and binders in repair. Clean out all the oil holes. Secure new bearings where they are needed. Have this work done on the farm or at the local blacksmith shop. The efficiency of farm machinery can be greatly increased for the coming season by careful attention to the above points. All this should be taken care of *before the spring work opens*. “Do it now” is the motto for repairing farm machinery.

**Care of Machinery.**—When using a tillage implement, make an especial effort to have the wearing surfaces scour, and then keep them in this condition. No such implement works properly when it does not scour. This is especially true of soil-preparation implements and cultivators. When thru with one of these implements, coat the bright surfaces with axle grease or a mixture of axle grease and Venetian red.



It is a common saying that "machinery does not wear out; it rusts out"—a condition that can be largely prevented. Every implement should be housed if possible. Wherever stored, implements should be off the ground, away from contact with dirt, straw, manure, or trash. Keep the chickens away from them.

Go over every machine at the end of the season and list the repairs which it will require for another season on a tag attached to the machine. Then place an immediate order for any new parts which will be needed.

*It is imperative at the present time that every precaution possible be taken to lengthen the life of machinery. Raw materials are scarce, labor difficult to secure, and in addition to the domestic demands the American manufacturer must supply our allies with farm implements. In some lines, orders from England and France have increased 500 per cent since the war started. Here is an opportunity to render direct service! Care for the American machinery, thereby making available an adequate supply for our allies across the sea.*

**The Tractor.**—The gas tractor has arrived in the corn belt. In the hands of successful farmers it has proved to be a most desirable source of farm power. It works day and night, if necessary. It enables the farmer with a minimum of help to do a large amount of heavy work, such as the preparation of the soil, in a short time. It is not susceptible to the effects of flies and hot weather. Where winter wheat is grown, it has proved to be a desirable source of power, as it permits the proper preparation of a seed bed when plowing is difficult and the soil hard to work.

To insure more efficient use of the tractor this coming season, especial attention should be given to two things: First, take steps to put the tractor in the best possible condition now; and second, learn as much as possible about the fundamentals of tractor operation.

The tractor requires more attention than any other machine which the farmer owns. Do not expect it to work without this attention. Before spring work opens, every tractor should be gone over by an expert. If the operator understands his machine thoroly, he is the man to do the work. If not, try to secure a local mechanic who is to be trusted, or obtain the services of a representative from the company which manufactured the machine.

The fundamental principles upon which a tractor operates are new to most of us. This fact has led to an endless amount of trouble, which can be remedied only when each and every one who operates a tractor makes a special effort to become thoroly familiar with the fundamentals of cycles, ignition, carburization, etc. There is available much literature on these subjects. Books and newspaper and magazine articles furnish a wealth of information. Read carefully the instruction book

which should be furnished with every tractor; if it has been lost, secure another. If possible, attend one of the tractor schools which will be conducted this winter. Leave nothing undone that will fit you to become a more proficient tractor operator.

**Service from the Dealer and the Manufacturer.**—Some dealers and most manufacturing companies maintain a corps of experts whose services are available to farmers whose machines are not working properly. Before calling for such services, be certain that the trouble cannot be remedied by a local mechanic. If it cannot, put in a request, thru the dealer, for help from the company. If a machine gave trouble last season, put in such a request now, thereby giving the manufacturers an opportunity to become familiar with the trouble and to plan for taking care of it before the rush season opens.

*Thus, we must take better care of our machinery. We must anticipate our needs. We must use our machinery more efficiently, reducing in every way possible the man labor required for producing maximum crops.*

*To put the production and use of machinery on a war footing requires co-operation and forethought on the part of manufacturers, dealers and farmers. Ordinary methods of doing business in this field are not sufficient to meet the demands of a nation at war.*

UNIVERSITY OF ILLINOIS  
COLLEGE OF AGRICULTUREEXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS  
IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE  
W. F. HANDSCHIN, VICE-DIRECTOR

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URBANA, ILLINOIS

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THE USE OF FARM LABOR  
DURING THE WARBY W. F. HANDSCHIN<sup>1</sup> AND J. B. ANDREWS<sup>2</sup>

The war has brought to our farmers an increased demand for food and a decreased supply of labor. Under these conditions it seems plain that if food production is to be maintained or increased, there must be a considerable change in the methods of production on the majority of our farms.

The suggestions made in this circular are based mainly upon the following sources of information: first, upon detailed cost-accounting studies made during the past five years on some twenty to twenty-five farms located in various parts of the state;<sup>3</sup> second, upon general accounts kept on approximately four hundred farms in ten counties in northern and central Illinois during the past two to three years; and third, upon a considerable amount of first-hand experience, by the authors, in handling farm labor in several middle western states. The suggestions are offered in the hope that they may, in a measure, help to meet the labor problems that confront our farmers. Unless we can solve these problems reasonably well, we shall not be able to feed ourselves and our allies in 1919, to say nothing of 1920 and later, should the war continue that long.

To any one who knows anything of farmers and farm life, it is useless to suggest that farmers work harder. The majority of farmers are already working up to the limit of their ability, at least during all of the cropping season. The only hope of meeting the demand for increased food production, so far as labor is concerned, must come thru the better utilization of the labor at hand. It is now almost certain that such labor will be reduced either in amount or in

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<sup>1</sup>Assistant Professor of Farm Organization and Management.<sup>2</sup>Instructor in Farm Organization and Management.<sup>3</sup>These studies were carried on by the Animal Husbandry Department in its investigations of systems of live-stock farming during the years 1913 to 1916 inclusive.

quality, or more likely in both, during the period of the war. In view of these facts it seems plain that the situation at best will be very difficult. It is therefore all the more important that we make every possible effort to solve the labor problem in so far as we can.

In increasing the efficiency of the labor we have, the following factors will probably be the most important:

The more even distribution of labor thruout the growing season by means of a good rotation of crops

The equipping of every laborer with enough horse power and with the size and type of machinery that will enable him to do the greatest possible amount of work

The planning of all the farm work so that every operation that is not definitely fixed as to time or season may be fitted in between the busiest, or "peak-load" periods, when every minute may be of special importance in producing or saving a crop

The practice of letting live stock harvest crops and feed themselves in so far as is practicable

The use of a careful follow-up system to help in planning and executing the work from week to week and from day to day

In any plan to make the best use of labor, no one of the factors mentioned is likely to entirely solve the problem. Each one, however, will help use labor to somewhat better advantage, and the combined effect of several or all of the six factors will certainly go a long way toward getting the necessary work done with the labor at hand.

**Plan a Good Rotation.**—A very large part of the man labor necessary in the production of farm crops is used during relatively short periods. For example, much of the labor required in producing a corn crop is used during a period of about two months, from May 1 to July 1, approximately. The major part of the labor necessary for most other farm crops is used over still shorter periods. Most of the labor they require is used during a period of from ten to fifteen days at planting time and a similar period during harvest. For different crops, however, the "peak-load" of labor comes at different times. If, then, crops can be selected which will spread the labor needed as evenly as possible thruout the growing season, instead of piling it up for short periods, the labor available can be better used; or stated in another way, one man can grow more acres of crop, or a given number of crop acres can be handled by a lesser number of men, which is the chief aim during the period of the war.

*Grow Wheat and Rye.*—Corn is in general our most profitable crop and produces, relatively larger amounts of food per acre than most crops grown in this section. We shall therefore not likely want to greatly reduce our corn acreage. Less than 5 percent of the corn crop is consumed directly by people, however, and only a small portion of it can be so consumed as long as we produce from 25 to 30 bushels per capita. From the standpoint of producing food crops that are consumed directly by people in any large way, wheat is far

more efficient in the use of land than any other of the crops common to the corn belt. For this reason wheat should be grown at least to a reasonable extent in all sections where soil and climate are at all well adapted to its production. In the corn belt this means largely winter wheat. Fortunately this crop is one of the best fitted to help in the more even distribution of labor. Preparing the ground and seeding does not conflict to any great extent with other important crop work, and harvesting usually comes when corn cultivation is fairly well along. The same is also true of rye, which is better adapted to some sections than wheat.

Many corn-belt counties normally grow from 50 to 65 percent of their improved acreage in corn and from 20 to 25 percent in oats. In these counties wheat or rye should make up from 10 to 20 percent of the improved area, from the standpoint both of the use of farm labor and of the production of food for human consumption. These crops should replace oats mainly, but also corn to some extent, especially where the latter occupies more than 50 percent of the improved acreage.

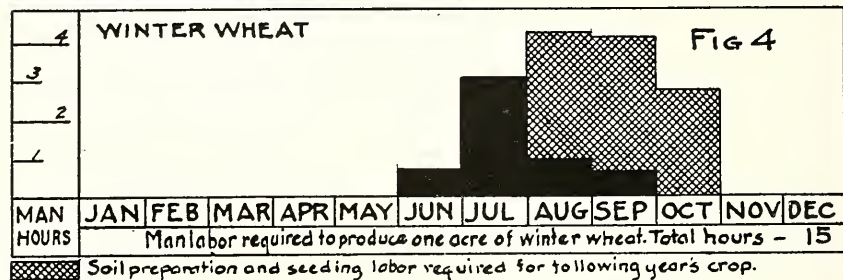
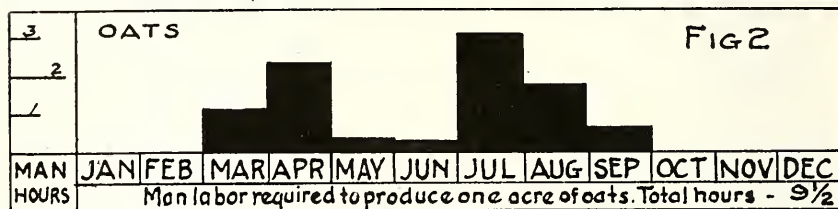
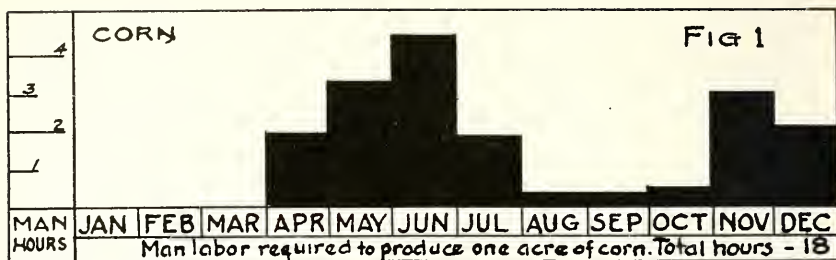
*Grow More Legumes.*—The proportion of legume crops, such as medium red, alsike, and sweet clover, and alfalfa, needs also to be considerably increased in many corn-belt counties, first from the standpoint of maintaining soil fertility, and second from the standpoint of a better distribution of labor. Many Illinois counties still have from 75 to 85 percent of their improved area in corn and oats, with less than ten percent in legumes. A fairly good rule in planning a rotation for our best corn-growing sections is, 40 to 50 percent in corn, 20 to 25 percent in small grain, and 20 to 25 percent in legumes. Unless especially heavy-producing legumes are grown, the rotation must include at least 20 to 25 percent of some legume if the nitrogen content of the soil is to be kept up.

The accompanying charts showing the distribution of man labor for different crops indicate how various crops may be selected in order to distribute more evenly the man labor.<sup>1</sup>

**Use Enough Horse Power ; Work Horses in Shifts.**—It seems now that the supply of labor will determine to a large extent how much food we can produce during the war. Every laborer, therefore, should be provided with as much horse power as he can use to good advantage, especially during the period when the crops are being put in—that is, from about April 1 to May 15. This is the period which taxes farm horse power to the limit. It is seldom that any other period, except occasionally that of fall plowing, demands really the maximum use of the horse power at hand.

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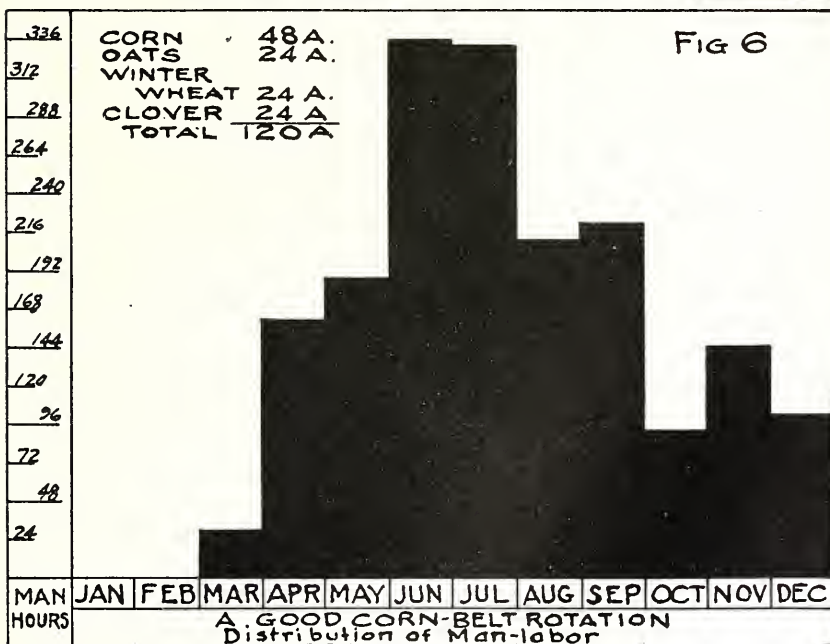
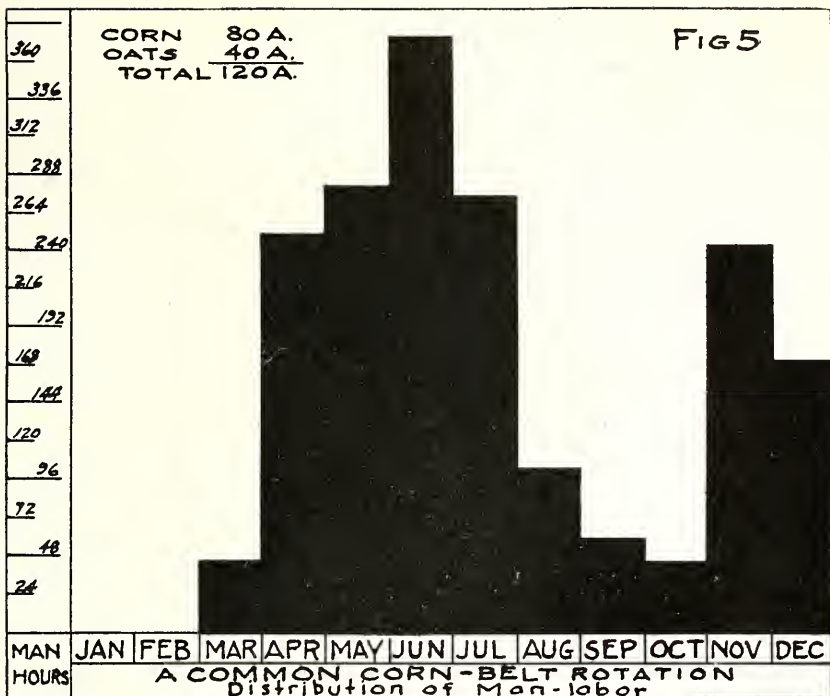
<sup>1</sup>When these distributions of man labor are studied in connection with the distributions of horse labor for these crops, the importance of a good rotation of crops is still further emphasized.



FIGS. 1-4.—Number and distribution of man hours, by months, used in producing four common corn-belt crops. The clover crops shown include second crops harvested for seed. This somewhat increases the man labor used on these crops. If no second crop were harvested, or if a part of the crop were pastured, the man labor used would be considerably reduced.

FIG. 5.—Poor distribution of man labor resulting from the common corn-belt rotation consisting of two years of corn followed by one year of oats.

FIG. 6.—Distribution of man labor in growing a rotation of two years of corn, one year of oats, one year of clover, and one year of wheat. The "peak-load," or highest labor requirement, is considerably less than for the rotation shown in Fig. 5, and the distribution thruout the season is considerably better.



It is often possible to save man labor by doubling up horse power.<sup>1</sup> This is sometimes done by using enough horses to draw a harrow attachment on a gang plow, or by having a man who is disking lead another team hitched to a harrow or to a second disk. While this has been done only occasionally in normal times, it may be possible to effect a saving of man labor more generally in this way, especially where the kind of men and horses used make it practicable. Some saving in man labor is often made by working horses in shifts, changing teams perhaps every quarter day. This is done during very hot periods, especially for such operations as corn plowing and wheat and oats harvesting. Most farms usually carry enough horses to make the shift for such operations. While many farmers have practiced shifting horses for the work mentioned, more will find it profitable during the present crisis.

**Use Large-Type Machinery.**—Corn-belt farmers are already quite generally using large-type machinery. It is desirable, however, that the practice of combining large units of machinery and horse power be carried still further wherever it is practicable to do so. This should be done in spite of the fact that farm machinery generally is costing just about twice as much as before the war. Such changes in the type of machinery should be made for two reasons: first, because it promises to be profitable, and second, because it makes possible the greatest production per man.

The purchase of a few items of larger-type machinery, even at double the normal price, will not increase the total machinery charge per acre by more than from 10 to 20 percent, even if the entire increase in cost is charged off the first year. It is safe to assume that the increase in the price received for farm products will be considerably greater than this expense. Entirely aside from the question of profit, however, is the question of maintaining and increasing the food production. This is of far greater importance and must be given first consideration by every loyal American farmer. It is important, therefore, that in just so far as it can be used to advantage, and can be obtained, farmers buy large-type machinery. It would be both unwise and unpatriotic not to buy really needed machinery just because it is high in price.

**Plan the Farm Work.**—In general all farm work may be divided roughly into three classes: *fixed*, *semi-fixed*, and *movable*.

*Fixed Work.*—Good farmers know that a large part of the work of the farm must be done at definite periods. Each of the planting, cultivating, and harvesting operations must be done usually within a few days or a week of a definite date if best results are to be obtained. These dates may vary somewhat from one year to another,

<sup>1</sup>The tractor, especially of the larger size, is one of the chief means of doubling up horse power. This will be discussed in detail in a later publication.





# LABOR CALENDAR

PREPARED BY THE DEPARTMENT OF FARM-ORGANIZATION

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
CROPS	Buy necessary seed (M)		Disk corn stalks(S)	Disk for corn(F)	Plant corn (F)
	Test seed corn (M)		Plow for corn(S)		Harrow
	Clean & test all other seed (M)		Disk for oats(F)		Roll corn(S)
	Break corn stalks (M)			Plant potatoes(F)	Sow soy beans
			Treat & sow oats(F)		Sow clover
			Sow clover(F)	Sow barley(F)	
				Sow rape(F)	
				Sow wheat(F)	
				Sow grass seed(F)	
				Sow alfalfa (F)	
	Haul-----manure(M)		Sow forage crops for live stock		
	Haul-----limestone(M)				
LIVE STOCK	Break-----colts(M)		Lambing (F)		Shear sheep(S)
			Foaling(F)		Castrate lambs(S)
			Farrow spring pigs(F)	Market fall pigs(S)	Dock lambs(S)
			Clip horses(S)	Beef cattle calving(F)	Castrate spring pigs(S)
	Feed-----steers		Market-----steers(S)		
	Feeding and general care of live stock		Hatch & care for young chickens(F)	Turn stock on pasture(S)	
MISCELLANEOUS	Overhaul all machinery tools & equipment (M)		Clean up farmstead(M)	Clean up & repair tile (M)	
	Repair-----buildings (M)		Oil & overhaul harness (M)	Make garden - continue garden	Spray fruit
	Cut wood (M)			Spray--fruit(F)	Cut-----
	Prune trees (M)				
	Prune vines (M)			Fence(M)	
	Spray for San Jose scale (M)				
	GENERAL REPAIRING OF BUILDINGS, MACHINERY, TOOLS, ETC.				
	WHEN THE REGULAR FA				

This calendar is based on the conditions found on the general farm. Many operations listed will vary with latitude and altitude. The letters following the operations listed above are used to indicate the season of the year.

# THE CORN BELT

MANAGEMENT - UNIVERSITY OF ILLINOIS

YEAR	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
(F) wheat (F) clover (F)		Harvest soy beans (F) Harvest cow peas (F)	Drill wheat (F) Drill rye (F) Gather (F) seed corn		
Shock (S) threshing Cut alfalfa (F)	Stack (S) threshing Cut alfalfa (F) Cut clover (F)	Stack (S) threshing Cut alfalfa (F) Cut clover (F)	Hull clover seed (S) Thresh soy beans (S) Thresh cow peas (S) Dig roots (S)	Husk ---- corn (F)	
Red hay (F) or alfalfa (S)	Sow alfalfa (S)	Fall harrow (S)	Fall ---- plow (S)		
(F) peas (S)	Haul manure (M) Haul rock phosphate (M) Haul ---- limestone (M)	Fall disk (S)	Cut silage (F)		Haul manure (M)
rams (S)		Market spring pigs (S)	Haul C.S.M., tankage, & millfeed (M)	House live stock	
	Farrow fall pigs (F)	Feeder ---- sheep (S)			
cattle ---- on grass			Buy steers (S)	Feed ---- steers	
Buy roosters from hens (S)			Sell old hens (S)	Feeding & general care of live stock	
	Market apples (S) Make cider (S)	Haul coal (M) Tile ----	Tile (M)	Oil & repair harness	Haul gravel (M) Haul cinders (M)
Buy fruit (F) ---- weeds (M) ---- hedge (M)	Repair fences (M) Repair buildings (M) House (S) machinery still out	Repair fences (M) Open tile drain (M)	Open tile drain (M) Fall building (M) Concrete work (M)		
Paint farm buildings (M)					
ILLUSTRATIONS OF EQUIPMENT ON RAINY DAYS & STORMY WEATHER, WILL NOT BE DONE					

the corn belt, mainly, Central Illinois.

It, to some extent, with individual farms.

Classification: (F), for fixed work; (S), semi-fixed; and (M), for movable work.



but the time allotted to each operation cannot usually be extended beyond a few days, without serious injury or loss to the crop.

Because of this fact, it is very important that the crop work especially be pushed with the greatest possible energy at these critical periods. This can be done only by carefully planning so that the entire time of every man and horse may be used to the best advantage. This means that every machine and tool be on hand, thoroly overhauled, and in as nearly perfect working condition as possible before the critical time comes. It means that seed be secured, cleaned, tested, and treated if necessary beforehand during less busy periods.

So also has been somewhat definitely fixed, altho perhaps to a lesser extent, much of the work connected with live-stock operations, such as feeding, breeding, and general management.

*Semi-fixed* work can usually be shifted from one to three or four weeks. Beyond this it cannot ordinarily be moved without loss or disadvantage. Fall plowing and shock threshing are good illustrations of semi-fixed work.

*Movable* work can usually be shifted over considerable periods, usually from one to two or three months, and frequently it can be shifted to almost any time during the year, depending on the time when it can best be fitted in. Hauling manure and other fertilizers and overhauling and repairing farm machinery, are good examples of movable work. This classification, however, can be at best only a general one. What would be at one time and place movable work might be at another semi-fixed, and vice versa.

*Plan to Fit Together the Three Classes of Work.*—In the planning of the farm work, the operator should aim to have the semi-fixed work fit in between the fixed work just as largely as possible. The movable work should be fitted in between the other two classes. If this can be done, it will go a long way toward securing the greatest amount of work from the labor at hand. The most successful farmers already carry out this scheme to a considerable extent, but even they will need to study their operations and make every possible improvement during the period of war. Such improvements will be of special importance, however, on the large number of farms where the matter has received all too little attention up to date.

*Study the Farm Work Calendar.*—The accompanying work calendar listing practically all of the operations that are likely to occur on any corn-belt farm, and showing the approximate dates when they should be done, may be helpful in planning the farm work. The important aim in planning all farm work is to make sure that no semi-fixed or movable work will need to be done when the critical crop or live-stock operations must have the labor or suffer. Enough unavoidable delays will still come in even with the best made plans, but without such plans such delays are certain to be much greater.

**Let Live Stock Harvest Crops.**—Much labor can be saved by letting live stock harvest crops instead of harvesting them by hand. This is especially true of the practice of growing pork on forage crops and also of hogging-down corn and other crops, and of growing and fattening market hogs on the self-feeder. All of these practices are already common on the most successful hog farms in the corn belt, but they should be much more generally practiced, in order first, to save man labor, and second, to make possible the use of more legume forage and less corn and other grain in making pork.

Swine alone, however, cannot consume so large an acreage of the legume crops as is necessary to maintain the soil nitrogen. Beef cattle and sheep are especially fitted to consume these crops with the minimum use of man labor. If legume pasture mixtures<sup>1</sup> make up a considerable part of the necessary legume area, the man labor requirements for the entire farm may be materially cut down. If hogs produced on forage require less corn, more corn will be left for beef cattle and sheep. Beef cattle, sheep, and hogs require relatively little labor. A combination of either beef cattle or sheep, or both, with hogs would therefore be well adapted to the consumption of our corn-belt crops and the best utilization of our man labor. Practically all of the corn crop must be consumed by animals. Unless plowed under directly, all of the legume crop commonly grown must also be fed to animals. At least a portion of these can be pastured off to good advantage. It is important to let the live stock do the work as far as possible.

**Plan All Work Some Time Ahead.**—The best farmers carefully plan all farm work for a considerable time ahead. Most of the fixed work can be planned for only a day or two or a week at most. Changes in weather may make replanning necessary from day to day or even from hour to hour. The chief advantage of a carefully made plan at the beginning of the year and of a follow-up system to keep tab on the work from day to day is that it keeps before the operator the things that need to be done. This will help him in deciding which need to be done first, and in fitting the various jobs together in such a way that the greatest amount of work may be done with the time and energy available.

The most important farm operations either with crop or animals are seldom overlooked. Much time is often lost, however, by not keeping careful tab on the miscellaneous work, such as overhauling and repairing machinery and tools, fixing fences, getting seed ready beforehand, castrating and ringing pigs, castrating and docking

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<sup>1</sup>Such mixtures should contain a considerable proportion of legumes, including some of the rank-growing ones. The latter are important from the standpoint both of adding nitrogen to the soil and also of resisting dry seasons. One of the most promising pasture mixtures being used is a seeding of 4 pounds of alsike, 4 pounds of alfalfa, 4 pounds of sweet clover, and 4 pounds of timothy.

lambs, and breeding animals at the proper season. Thru being neglected at the proper time (*i. e.*, usually between the busiest seasons and on rainy days and bad weather), these matters often conflict with the most important work at the rush periods. Every such miscellaneous job that could have been done at some other time means practically a waste of time at the most critical periods, when every hour is of greatest importance in producing or saving a crop.

**Keep Tab on the Farm Work.**—A small notebook carried in the pocket or a pad kept in some convenient place may be used to jot down from day to day such items as come to the attention of the operator. Such notes help greatly in providing profitable work for rainy days and at odd moments during the cropping season. Used in connection with the work calendar, such notes will add much to the most efficient use of man labor.

**Farm Labor Must be Drawn from Other Sources.**—In order to maintain as nearly as possible the normal supply of farm labor, the farmer must draw upon other than the usual sources. The most important of these will probably be the following:

1. Retired farmers from the small towns and villages, especially at the critical periods, such as planting and harvesting.
2. Merchants and other business men from the country towns and villages. These can usually get away from their business for a few days at a time, especially during the farmers' rush seasons, when business is very quiet in town.
3. Boys of high school age who do not normally work on farms.
4. Women workers for some of the lighter work of the farm.
5. Other workers, especially those who have had more or less farm experience, who are engaged in less essential industries, many of which will no doubt be curtailed if the war continues for any length of time.

**Retired Farmers Make Skilled Hands.**—Many so-called retired farmers normally do some farm work, either on their own farms or elsewhere. Last season many more of them responded to the call for service in raising crops. During the coming season every retired farmer who is physically able should be on the "firing line" again. Most of these men have been not only high-class farm hands, but also skilled farm managers, and can now be of great service both in doing actual farm work and in helping to direct unexperienced labor, such as will necessarily be used to a greater extent than usual.

It is especially important that the retired farmers help at the rush seasons, such as planting and harvesting. It will also help greatly to have these men actually agree in advance, in so far as they can, to take the job of "tending" thirty or forty acres of corn. This could be done in many cases, and it would help greatly in assuring the farm operator that he can put in somewhere near his normal acreage of corn and have it taken care of. The able-bodied retired farmer is going to have an opportunity to render a really important service during the present emergency.

**Merchants and Others Can also Help.**—Many merchants and other business men and their assistants in small towns and villages have had farm experience. Most of them are occupied with their own business, but they can often spare some help, and that at the periods when it is of the most importance. During the rush season on the farm, very few farmers go to town. This is, in fact, the dull season in the rural village. If the need for farm help should be really critical at such periods, the men from the small town will have an opportunity to render a very important service in crop production, especially if they are somewhat experienced in farm work.<sup>1</sup>

**Town Boys Soon Learn.**—The past season has already demonstrated the value of boys of high-school age for doing farm work. Even tho they have no experience in farming, many of these boys will develop, under proper direction, into really valuable hands in the course of a season. Many of them will no doubt prove of little value. In the main, however, the value of their service will depend in a large measure upon the skill of the farm operator in training them. The nation-wide organization of the boys, thru the United States Boys' Working Reserve and other agencies, promises to do much for the farmer in the way of selecting the boys who are really interested in farming and in placing the best ones on farms where they will have a fair chance to make good. Farm boys have always done much of the farm work. City boys carefully selected should be an important factor in solving the farm labor problems after they have had a chance to get some training in the affairs of the farm. If the war continues beyond the year 1918, as we must now assume it will, it is very important that we train as many boys during the coming year as possible. They will be experienced farm help in 1919 and 1920.

**Women Can Help at Rush Periods.**—In general American farm women do little work in the field. In so far as they actually take any part in production, it is confined almost entirely to the dairy, garden, and poultry enterprises. To all of these, women are well adapted, and many farm women and girls find them both enjoyable and profitable. The farm work actually done by women and girls will likely be confined to the lighter operations, such as raking hay, mowing, using a riding cultivator or plow, and similar work, and these only in case of the most critical needs for a few days at a time.

**Farm Labor Must Come from Other Industries.**—Our industrial life as compared with that of the other nations at war, is as yet

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<sup>1</sup>The most critical period as regards the need of skilled labor accustomed to handling machinery and teams comes perhaps during soil preparation, planting, and corn cultivation. During haying and harvesting, a larger proportion of unskilled labor may be used.



only slightly affected. Should the war continue for two or three years or more, many forms of production and service will no doubt be greatly reduced. Many important industries not directly connected with war production are already running with short crews or are entirely shut down. This curtailing of industries will make available relatively more men for military service and the essential war industries, including the manufacture of munitions and other war materials, transportation, shipbuilding, and agriculture.

**Farm Wages Must Be Fair.**—In competing for labor with other industries, the farmer must naturally expect to pay wages which are somewhere near comparable with those paid elsewhere if he is to have help. Just how far he can go in this competition is a difficult question for him to solve. The present price of most of our ordinary farm products is from one and one-half to three times as high as it was just before the opening of the war. The expense of production, however, has also increased, tho just what this increase has been it is hard to estimate accurately. The chief items of expense in producing farm crops are rent, man labor, and horse labor. Rent or interest on land investment, which makes up about 40 to 50 percent of the cost of producing crops, has increased relatively little during the war. The cost of horse labor has increased about 50 percent. Upon the whole, the increase in the cost of production during 1917 amounted to perhaps 35 to 40 percent over the pre-war basis. If this should be somewhat further increased in 1918, it may become 50 percent greater than before the war. The average value of the crops actually grown on our corn-belt farms has about doubled during the past three years.

On the basis of these increases it would seem that the farmer can afford to pay considerably more for labor than he has been paying. This would be especially true if he could be assured of these prices for a year or two after the war, as he has already been assured, to some extent, of the price of wheat and pork for the period of the war.

**American Farmer Will Do his Duty.**—At the present moment it is difficult to see just how the farmer is going to get enough labor to increase or even to maintain his production. However, the combined result of the additional labor from sources not usually counted upon and the efficient use of the total labor at hand, should go a long way toward accomplishing what appears to be impossible at this date. Changes in the usual systems of production may have to be made. The situation at best will be very difficult, but from what is known of the American Farmer, it is safe to assert that if he has any reasonable chance in the way of favorable seasons and an adequate labor supply, he will feed not only us but our allies.



UNIVERSITY OF ILLINOIS  
COLLEGE OF AGRICULTURE

EXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS

IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE

W. F. HANDSCHIN, VICE-DIRECTOR

URBANA, ILLINOIS

PROTECT THE WHEAT CROP  
ERADICATE THE COMMON BARBERRY FROM  
ILLINOIS

THE ESSENTIAL FACTS

Every grain of wheat is needed.

Wheat rust causes large loss.

The COMMON BARBERRY harbors the rust, serves as a source of infection, and thus increases this loss. The Japanese barberry is harmless.

Any rusted barberry bush is surely injurious to wheat, and a barberry bush even if not rusted is a possible danger.

The only safe course is to remove all the common barberry on your premises.

Inspectors will soon be on the watch for barberry in Illinois, and they will have the authority to force its removal when infected.

The State Council of National Defense and the State Department of Agriculture join with the U. S. Department of Agriculture in this movement.

## SOME OF THE FACTS IN MORE DETAIL

### WHEAT RUST

There are two stages of the black stem rust on wheat; the summer stage comes first, as yellow spots, and is followed by the winter stage, consisting of black spots (Fig. 1.)

The growth of this rust in the plant saps its vigor, stunts its growth, and results in an inferior grain. The loss from severe rusting is many bushels per acre. This loss is largest on spring wheat but it is also large on winter wheat.

### THE BARBERRY RELATION

The spores of the black, or winter stage of the rust, can infect only the common barberry; they cannot directly infect wheat. In the spring they produce on the barberry leaves swollen spots bearing minute orange-colored cups full of another crop of spores. If the barberry leaves are not available, the crop of black winter spores becomes absolutely harmless and one great source of spring infection is avoided.

These facts have been known and scientifically proved repeatedly. Any farmer who has observed a barberry bush to windward of a wheat field has had opportunity to see the fan-shaped area of rust arising from the barberry bush. Such cases are obvious enough. *A barberry bush that is not near a wheat field is also to be feared* because the spores from the barberry may reach other susceptible grasses, of which there are many kinds, and there produce crops of summer spores which blow farther to other fields and so carry the disease to wheat fields.

It is an absolute fact that the common barberry increases wheat rust and that to remove the barberry would diminish wheat rust. Early laws requiring the removal of the barberry were made, but since they were not enforced they were not effective. The experience of Denmark, however, proves the wisdom of barberry eradication. The law enforcing the eradication was made in that country in 1903 and after eleven years we read:

- “1. That the black rust has disappeared gradually, contemporary with the barberry bush.
- “2. That the violent, destructive black rust attacks, which affected the whole or most of the country, with two or three years interval, have now ceased.
- “3. That the weaker attacks which affected the grain and grasses and especially the oats in Jutland are now practically unheard of, or at least come late in the fall.

4. That, where there is still found a barberry bush, the black rust has the power to infect and cause strong attacks upon the wheat.

"We cannot deny that here in Denmark we have as definite proofs as we can obtain about the hand-in-hand elimination of the barberry bush and the black rust."

There are two species of barberry commonly planted in Illinois: (1) The tall, common, or European barberry (*Berberis vulgaris*); (2) The Japanese barberry (*Berberis Thunbergii*). There is a purple-leaved variety of the tall barberry, known as *Berberis vulgaris purpurea*, which of late years has been planted more extensively than the green-leaved form. The tall barberry is distinguished from the Japanese by the following characteristics:

JAPANESE BARBERRY

(Does not harbor rust)

1. Edge of leaf smooth
2. Twigs of last year reddish brown
3. Berries single or, rarely, in groups of 2 or 3
4. Thorns usually single

COMMON (EUROPEAN) BARBERRY

(Harbors rust)

1. Edge of leaf saw-toothed
2. Twigs of last year dun or grey
3. Berries in a cluster on one main stem
4. Thorns usually three-pointed

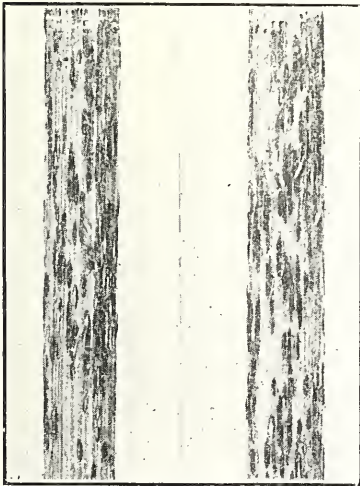


FIG. 1.—BLACK STEM RUST ON WHEAT

The elongated black spots are the spores in masses. (After Freeman)

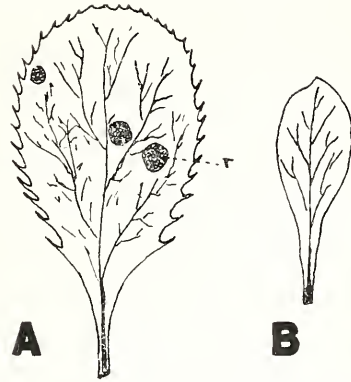


FIG. 2.—LEAF OF THE COMMON BARBERRY AND OF THE JAPANESE

A—Common barberry leaf infected; r, Rust spots, orange red in color. Note saw-toothed edge of leaf.

B—Japanese barberry leaf. Note smooth edge of leaf and relative size as compared with A. This species does not harbor rust.

The European barberry and its purple-leaved variety harbor the rust, while the Japanese barberry does not. Several species of Mahonia (*Mahonia ilicifolia*, *M. aquifolia* and *M. repens*) are also known to produce the rust, and these should not be planted.



FIG. 3.—TWO TWIGS OF BARBERRY

A—Japanese barberry (*Berberis Thunbergii*) has single-pointed spines. It is safe to plant. B—European or Common Barberry (*Berberis vulgaris*) has three-pointed thorns. It harbors black rust and should not be planted.

Other species of barberry are rarely found in ornamental plantings in Illinois, and may be passed over with a word of warning to all who desire to use such species. All species which resemble the European, or tall form, in general habit are susceptible and should not be planted.

Fortunately the common, or tall, barberry is not wide-spread in Illinois and is not of any value esthetically or otherwise. Look upon it as you do upon the rat and exterminate it. This recommendation is made by the U. S. Department of Agriculture, and concurred in by the State Department of Agriculture, and the State Council of National Defense.

### We Urge Your Cooperation

Send to us:

1. Facts concerning the location of any common barberries that are not removed. State name and address of owner or occupant of premises.
2. Also information concerning the existence of the rust on such bushes.

F. L. STEVENS

H. W. ANDERSON

Commission in Charge of Barberry Extermination in Illinois, University of Illinois

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UNIVERSITY OF ILLINOIS  
COLLEGE OF AGRICULTURE

EXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS

IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE

W. F. HANDSCHIN, VICE-DIRECTOR

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URBANA, ILLINOIS

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## GROW MORE WHEAT IN ILLINOIS

BY W. L. BURLISON AND W. F. HANDSCHIN

If "FOOD WILL WIN THE WAR," bread and the men who produce it will play a large part in winning it.

To insure ourselves and our Allies against a serious shortage of bread grains, we must plant a large enough acreage to take care of our need, not only in a favorable crop year, but in a year of poor crops.

Our present wheat acreage is about one-third of what we should have if farmers generally used a four- or five-year rotation in which the wheat crop occurred once.

Growing fall wheat in the rotation saves labor, because the work is then more evenly distributed thruout the cropping season.

The yield as well as the acreage of wheat should be increased in every way practicable.

Plow as soon as the previous crops are removed. Prepare a good seed bed. Choose a standard variety of seed. **GET YOUR SEED NOW.**

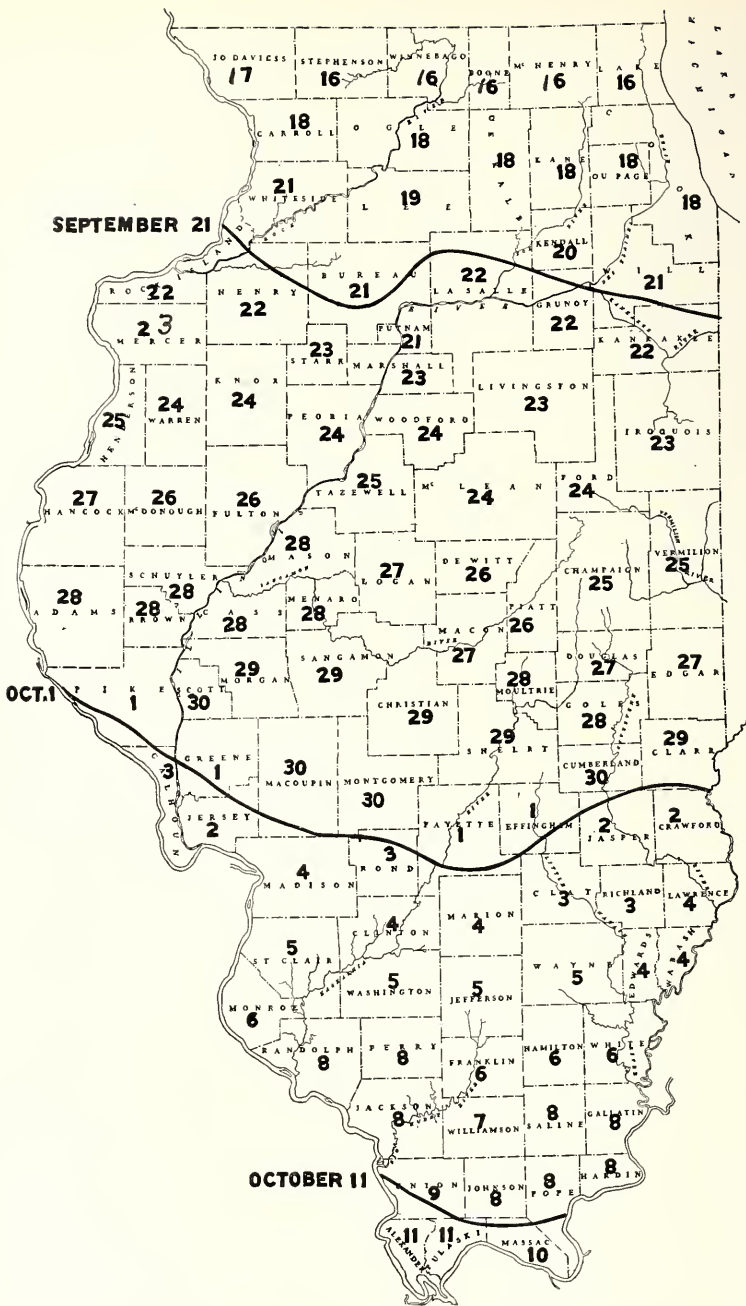


FIG. 1.—WHEAT SEEDING CALENDAR

The date for the seeding of winter wheat so as to avoid Hessian Fly injury can be determined for any county by referring to the dates given in the above figure.



# GROW MORE WHEAT IN ILLINOIS

BY W. L. BURLISON, ASSOCIATE CHIEF IN CROP PRODUCTION, AND  
W. F. HANDSCHIN, VICE-DIRECTOR AGRICULTURAL EXTENSION SERVICE

Wheatless days and the use of wheat substitutes during the past year have taught us to place new values on wheat. The substitutes we have learned to use in an emergency have only helped to emphasize the fact that there are no really satisfactory substitutes for this standard bread grain. It is therefore important that we produce enough wheat to provide bread for our armies and our Allies across the water and for our civil population at home. If "Food Will Win The War," bread and the men who produce it will play a large part in winning it.

## WE MUST PLANT A LARGER ACREAGE

On the basis of the best figures available we shall need all of the wheat we can grow on our normal acreage in a favorable crop year in order to thoroly meet our own needs and those of our Allies. To insure ourselves and those depending upon us against a serious shortage of bread grains, we must plant a large enough acreage to take care of our needs, not only in a favorable crop year, but also in a year of poor crops. The most important wheat producing areas in the United States are already growing a large proportion of their improved acreage in this crop. They can increase their wheat acreage only moderately without throwing their systems of farm management still further out of balance from the standpoint of good rotations and the best use of man and horse labor. The increase in the wheat acreage should be made mainly in those sections which are fairly well adapted to its production but which ordinarily grow this crop in only a limited way.

## MORE WHEAT FOR ILLINOIS

The corn belt generally and Illinois in particular, perhaps, should increase considerably its wheat acreage. This should be done not only to supply the wheat that is needed to win the war, but also in the interest of good rotations and good farm management. According to the census of 1910, Illinois had in 1909 slightly less than 8 percent of its improved acreage in wheat. According to the Yearbook of the United States Department of Agriculture, this state had in both 1916 and 1917 less than 6 percent of its improved acreage in wheat. These acreages could be more than doubled without reaching the proportions we should have in a four-year or five-year rotation in which the wheat crop occurred once.

## ROTATIONS FOR CENTRAL ILLINOIS

In the most important corn-producing section of the state, that is, central Illinois, a five-year rotation consisting of two years of corn, one year of oats, one year of clover or other legume crop, and one year of wheat would be fairly satisfactory to meet the present emergency. This rotation (with 20 percent of wheat), would provide just about three times the average proportion of wheat now grown in the state. In central Illinois it would represent an even greater increase over the proportions grown at the present time.

A four-year rotation consisting of one year of corn, one year of oats, one year of clover or other legume crop, and one year of wheat would also be satisfactory for this section, especially for grain farmers. This rotation would still further increase the proportion of wheat.

Both these rotations are coming into somewhat common use among the best farmers in the corn-belt section of the state. Both make possible a very satisfactory distribution of man and horse labor during the cropping season, and both permit the seeding of sweet clover in the wheat as a cover crop to be plowed under for corn. Farmers in central Illinois should plan to grow from one-fifth to one-fourth of their improved land in wheat.

## ROTATIONS FOR SOUTHERN ILLINOIS

In southern Illinois, which grows a major part of the wheat produced in the state, the proportion of wheat grown may be still further increased. Rotations containing from one-fourth to one-third of wheat may be used to good advantage in this section. The four-year rotation consisting of corn, oats, clover, and wheat is usually a satisfactory one on well-limed land. By seeding wheat in the standing corn, or after the corn is cut for silage or shocked in the field, a three-year rotation of corn, wheat, and clover may be used. Other good rotations are: corn, cowpeas or soybeans, wheat, and clover; and corn, cowpeas or soybeans, and wheat (with a cover crop of sweet clover, if the land has been well treated with limestone).

## MORE WHEAT AND GREATER PROFITS

Naturally the rotations, or the proportions of wheat here suggested, may have to be varied somewhat for different soil areas or for individual farmers. The two chief facts to be kept in mind, however, are: first, that we need to increase our acreage of wheat in order to insure for ourselves and our Allies a really satisfactory bread supply; and second, that such increases are really desirable from the standpoint of the best rotations and the most profitable systems of farm management.

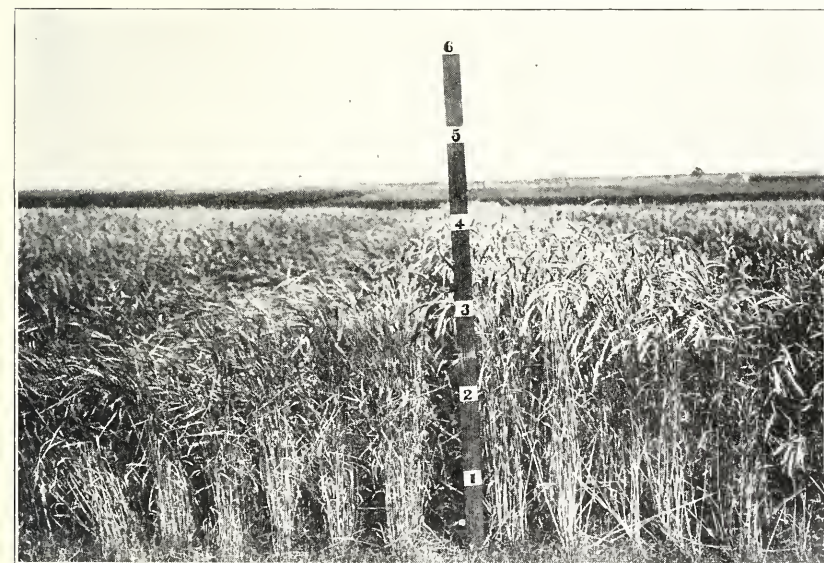
## SHALL WE GROW WHEAT OR RYE?

In deciding whether to grow wheat or rye, Illinois farmers should be guided by the following facts. Wheat is in general more satisfactory as a bread grain than rye. The price of wheat is fixed by Congress, and there is therefore less risk in growing it than in growing rye; the price of rye is not fixed, and may be higher or lower than that for wheat when the farmer comes to sell it. This latter point adds to the necessary uncertainty as to yields, the additional uncertainty as to prices. If the farmer's land is adapted to growing wheat, it would seem wise for him to take only one chance instead of two and grow wheat instead of rye.

Rye should therefore be grown only on soils and under conditions to which it is distinctly better adapted than wheat.

### ADAPTATION OF WHEAT AND RYE

Winter wheat can be grown on a wide range of soils, varying from clay to the loam types. On all of these soils, the crop responds to rational soil treatment. Rye may well be substituted for wheat on the poor or untreated soils in Illinois. On such soils it will produce greater returns than wheat. Rye also withstands winter-killing better than wheat. It does not lodge badly, and in general the



WINTER WHEAT

WINTER RYE

Fig. 2.—The above figure shows the more serious lodging of winter wheat as compared with rye. The crops shown are growing side by side under the same conditions as to soil and other factors.

Hessian fly is not known to seriously injure it in this country. In Europe, however, where rye is sometimes grown to the exclusion of wheat, it is often much damaged by the Hessian fly.

### THE PRICE OF WHEAT AND RYE

The price just now being offered for the 1918 rye crop is considerably lower than that fixed for wheat. This is in harmony with usual conditions, the price of wheat having been 25 percent above that of rye as an average of the ten years preceding the war, even tho the price of rye ranged above that fixed for wheat during a considerable portion of the year just past. If we assume, however, that the price for rye is to be somewhat less than that fixed for wheat, there are still two very good reasons why we should grow rye on the lands that are somewhat better adapted to it than to wheat or other crops: first, because it will increase by that much our supply of bread grain, which is so necessary to the successful conduct of the war; and second, because on such soils rye, even at present prices, will likely be as profitable as any other crop which can be grown.

### GROWING FALL WHEAT SAVES LABOR

The growing of fall wheat in the rotation is of special importance in helping to distribute more evenly the man and horse labor required in crop production. The work of plowing, soil preparation, and seeding comes in late summer, when farm work is not especially pressing, and it can therefore be done with the least amount of conflict with the growing of other crops, such as corn, oats, and hay. Also, the harvesting of fall wheat usually comes at a time when corn is fairly well laid-by and oats are not as yet ripe. The wheat harvest may conflict somewhat with hay-making, especially in the case of clover, but the wheat crop reduces by that much the corn and oats acreage. This helps to cut down somewhat the greatest rush of work, or "peak load", which usually comes at the time of oats seeding and corn planting. As a general rule, the introduction of fall wheat into the rotation makes possible a much better distribution of labor, and this is particularly important during the war, when the labor supply is certain to be short and the need for handling it to the best advantage is of vital importance.

### YIELDS AS WELL AS ACREAGE SHOULD BE INCREASED

In attempting to increase the production of wheat, we should not only increase the acreage planted, but we should make every effort possible to maintain or increase the yields per acre. This will be best done by making careful use of all manures produced on the

farm; by growing legume crops such as the clovers, soybeans, and cowpeas; by using mineral fertilizers, such as limestone and phosphate, where these are needed; and by good methods of soil preparation, cultivation, and general good farming practice.

### DANGER FROM CHINCH BUGS

Perhaps the greatest objection to the more extensive growing of wheat in the corn belt is the danger from the chinch bugs, which may breed in the wheat (or in rye, if that be grown), and then destroy the corn. The corn-belt farmer must therefore be prepared to drop wheat out of the rotation if the chinch bugs begin to appear in dangerous numbers.

### PREPARING THE SEED BED

The seed bed for wheat should be plowed as soon as the preceding crop is removed. As a rule, five to seven inches will be found a desirable depth. During a dry season or on soils which are most seriously affected by drouth conditions, it is well to disk the fields before plowing. This will help to retain the moisture and kill the weeds that spring up after the previous crop has been removed.

As soon as the ground is plowed it should be harrowed. This will break up most of the clods. Some time before seeding, a good double-disking and a stroke with the spike-tooth harrow will be found sufficient additional preparation for wheat ground.

If the previous crop was one such as soybeans or cowpeas, plowing is not necessary unless the soil for that crop was poorly prepared and carelessly cultivated. A thoro double disking and harrowing will develop a satisfactory seed bed in most instances. If corn has been removed for silage, treatment similar to that for soybean ground is satisfactory. In some sections, wheat is seeded between the rows of corn with good success. This considerably reduces the labor required, but the yield will be somewhat less than on a well-prepared seed bed.

### CHOOSE A STANDARD VARIETY

It is very important to use a variety of wheat well adapted to local conditions. There is a marked difference in varieties. Some varieties winter-kill much worse than others, while certain kinds lodge and shatter badly. It is well to use varieties which grade and sell best on the market. As a rule, hard wheats command higher prices than soft wheats.

There is not so large a number of varieties of rye as there are of wheat, nor is the difference in varieties so great.

WHEAT VARIETIES FOR ILLINOIS<sup>1</sup>

*Northern Illinois.*—Continued tests have shown that Turkey Red is the highest yielding variety for northern Illinois. Turkey Red is a bearded hard wheat. It is one of the best kinds for resisting winter-killing. Minnesota Reliable, Kharkof and Malakoff are other promising wheats for this section.

*Central Illinois.*—The leading varieties of wheat are, Turkey Red, Malakoff, Fultz, Hungarian, Pesterboden, Kharkof, and Dawson's Golden Chaff. Red Wave and Red Cross are two other standard wheats much used in many localities.

*Southern Illinois.*—Hard wheats are not well adapted to southern Illinois. The more important varieties which are successfully used are Fuleaster, Economy, Indiana Swamp, Harvest King, Missouri Pride, Rudy, and Poole.

## TIME OF SEEDING AND AMOUNT OF SEED

Wheat should be seeded early, but not ahead of the time when there will be danger from the Hessian fly. Dr. S. A. Forbes, for many years State Entomologist, recommends the dates indicated in Fig. 1. So far as possible these dates should be observed. As indicated above, the Hessian fly does not usually attack rye, and therefore in seeding rye it is not so important to follow these dates closely. Rye may be seeded before or after the planting of wheat; the seed bed for rye should be prepared about the same as for wheat.

As a rule, wheat is seeded at the rate of five pecks per acre. This amount is increased sometimes to a bushel and a half per acre. Rye is seeded at about the same rate.

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<sup>1</sup>For further information on varieties of wheat and rye send for Illinois Experiment Station Bulletin 201, "Yields of Winter Grains in Illinois."

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JULY, 1918

EXTENSION CIRCULAR No. 25

UNIVERSITY OF ILLINOIS  
COLLEGE OF AGRICULTURE

EXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS

IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE

W. F. HANDSCHIN, VICE-DIRECTOR

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WAR TIME SUGGESTIONS  
FOR HOME ECONOMICS EXHIBITS AT  
COUNTY OR COMMUNITY FAIRS

BY  
MAMIE BUNCH  
AND  
NAOMI NEWBURN

URBANA, ILLINOIS

## PURPOSE

The purpose of this circular is to present information which will help to prevent the waste ordinarily incurred in exhibits at fairs, and to encourage special effort to have in war time only such exhibits as will *help to win the war* and to make our homes and communities better *after the war*.



## WAR TIME SUGGESTIONS FOR HOME ECONOMICS EXHIBITS

MAMIE BUNCH, STATE LEADER IN HOME ECONOMICS DEMONSTRATION  
NAOMI NEWBURN, INSTRUCTOR IN HOME ECONOMICS EXTENSION

In order that exhibits may be a real benefit to the community, it is necessary to have some fairly definite ideas of what to exhibit, how to exhibit, and a basis for comparison of values. Exhibits should be made inspiring and helpful by showing the housewife in the home how to help win the war by conserving food, clothing, energy, health, and ideals. If the exhibit of one person excels in some point, that of his neighbor may excel in some other; then each has a chance to work up the highest standard reached and to avoid making again the errors discovered by comparison.

If exhibits are organized, standardized, and graded so that the best from one community competes with the best from other communities in a township, the best from one township with the best from other townships in the county, then the best from one county with the best from other counties in the state, the home exhibit at the State Fair will really represent the activities of Illinois homes. The joy of excellent achievement in patriotic endeavor for production and conservation will mean much more than the mere winning of a premium.

Since exhibits are examples of the best products of each kind from the homes; and since home economics has to deal, not only with the kind and quality of materials, but also with both time and money-saving in a comparison of values, it seems wise to call attention in such exhibits to the cost to the exhibitor of the material of each entry and the time required to prepare it. Such information may be stated on the entry card. Economy of time and strength should be a factor in determining and rating the entries in the exhibits in order that people may be influenced to consider time and strength as well as money in the planning and doing of household tasks.

It is suggested that this circular be widely distributed in districts planning exhibits and that local societies use the suggested score cards and entry tags presented here.

### FOOD EXHIBITS

In planning the exhibits one must remember that our country's food problem is to use less of the foods which must be shipped "over there"—wheat, meat, fat, and sugar—and substitute for them in the diet the foods which are plentiful.

## I. EXHIBIT IN PLACE OF WHEAT PRODUCTS

1. Corn
2. Potatoes
3. Oats
4. Barley
5. Rice

Yeast breads must contain as little wheat as possible. There should be a good exhibit of wheatless quick breads. Cakes, cookies, and pies, if exhibited, ought to be wheatless. The use of corn products, oats, potatoes, and potato products to save wheat should be featured.

## II. EXHIBIT TO REPLACE MEAT IN THE DIETARY

1. Milk
2. Cottage cheese
3. Eggs
4. Nuts
5. Beans
6. Peas

Home produced foods which will adequately replace meat in the diet may be shown in one section. Here belong milk and milk products such as cottage cheese. Here, too, should be egg exhibits with equipment for candling and marketing eggs. The method and equipment for preserving eggs should be illustrated. Nuts, beans, and peas are vegetable foods which help to serve the same purpose in nutrition as meat. Because of their high nutritive value and low cost, soybeans may be featured.

## III. EXHIBIT TO REPLACE A PART OF THE SUGAR IN THE DIETARY

1. Honey
2. Molasses
3. Sirup
4. Dried fruits

In the section of foods which help to take the place of sugar, exhibit honey, molasses, corn sirup, and dried fruits. Corn sirup can be used to replace a large part of the sugar ordinarily used in canning, and in making preserves, jams, butter, marmalades, and jellies, and this is one very practical way of saving sugar.

## IV. EXHIBIT OF PERISHABLE FOODS FOR HOME CONSUMPTION

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Fruits</li> </ol> <ol style="list-style-type: none"> <li>a. Fresh</li> <li>b. Canned</li> <li>c. Dried</li> <li>d. Preserved</li> <li>e. Pickled</li> </ol> | <ol style="list-style-type: none"> <li>2. Vegetables</li> </ol> <ol style="list-style-type: none"> <li>a. Fresh</li> <li>b. Canned</li> <li>c. Dried</li> <li>d. Pickled</li> <li>e. Brined</li> </ol> |
|---|--|

Diagrams or models of equipment and plans for drying and storing vegetables should be displayed. Vegetables which can be kept more simply by storage, such as onions, cabbage, potatoes, and parsnips, should not be canned. Such products sometimes appear in collections of canned goods, but they detract rather than add to the value of the collection, since canning them represents a waste of time, energy, fuel, glass, and space. In collections of canned products selection and quality are the main points to be considered. Announcement should be made of the minimum number of jars which will be considered a collection.

Foods which have been exhibited must be disposed of in such a way that nothing is wasted.

### TEXTILE EXHIBITS

In the textile department there is need to remember that everything should be considered in relation to the war. Red Cross supplies, knitting, and relief work should have an important place. Because of textile conditions, it is very necessary that remodeling, renovating, and mending of garments be practised by every housewife. This work can well be featured at the fairs.

In the handwork department, certain standards should be kept constantly in mind, for more time is consumed in making "fancy work" which has little use and no artistic value than in any other field of household art. The following suggestions will be useful in determining whether or not the articles are worthy of being exhibited: Have the articles a real use; are the materials suitable and harmonious; and do they fulfill the purpose for which they were intended? Does the decoration conform to the principles of decorative design; is it subservient to the use of the article? Is the workmanship worth displaying? A little thought on such fundamental principles will greatly improve the educational value of textile exhibits.

Let our textile as well as our food exhibits show our interest in war relief. Energy and material which should be devoted to war purposes should not be used in making textile exhibits. .

### HOME DECORATION AND EQUIPMENT EXHIBITS

It is often desirable to exhibit pictures which are really works of art and which are valuable as a means of self-expression. Along with these there may be pottery, reed work, etc. Ideals of good home decoration may be fostered by suitable combinations of wall coverings, floor coverings, draperies, and curtains. Suggestive plans for arrangement of kitchen equipment may prove exceedingly helpful to

some. A display of kitchen utensils and demonstrations or suggestions of how to care for them will help to answer the housewife's question of what to buy and how to care for it. Decorative lawn features, such as an arbor, a garden seat, and a trellis for vines, may be suggestive.

The question of home sanitation and methods of meeting it could be suggested by models of proper water and drainage systems, models showing systems of garbage disposal, models of homemade fly traps and of proper window screening, and arrangement for protection from flies and for adequate ventilation.

Any homemade labor-saving device, such as a wheel tray, a wood box to be filled from without, and a cabinet or closet for mops, brooms, and cleaning materials, may be exhibited.

### GENERAL DIRECTIONS

The list of entries and the score cards should be published in the local papers far enough in advance to enable people to prepare the exhibits in such a way that they will conform to the standards and ideals which have been set. Posters or static exhibits will be effective in bearing the message of the times. Such material can often be obtained from the Agricultural Library of the State University.

The exhibit hall should be pleasing in general appearance, clean, and as well lighted and ventilated as possible. Food materials must be protected from flies and dust; glass cases are preferable for baked goods, and butter. Exhibits should be so classified and grouped that they can be judged easily. A superintendent in charge of each department should have products properly entered and should assist in the judging. The scores and entries should be printed on cloth or heavy paper tags, which may be ordered in quantity since they can be carried over from year to year. The plan of having the score on the back of the entry card will save both confusion and expense. These tags should be neatly attached to containers of the product. In case of baked goods they can be attached, by means of clips, to the paper plate. With canned products, jellies, etc., it is better if the tag is tied around the jar or glass and not to the lid, because lids are likely to be mislaid or exchanged during the judging process.

Provide for the judge the following:

Small table or enough space for judging	1 fork 2 spoons
Hand towel	1 plate
Dish cloths	2 enamel pie plates
Sharp knives	or utility pans

An assistant to open cans and to help in rearrangement of products facilitates the judging process.

## SUGGESTED SCORE CARDS

In the case of all baked products, greater recognition should be given to those containing the higher percentage of wheat substitutes.

In the case of cakes, cookies, canned fruits, jellies, jams, preserves, butters, and marmalades, sugar saving should be encouraged by giving greater recognition to good products containing a large proportion of substitutes for sugar. See last paragraph, page 4.

## VICTORY BREAD

For judging, classify together the breads which contain equal amounts of substitutes. More satisfactory bread is obtained by using small, individual loaf-size pans. Better bread, as far as palatability and texture are concerned, is obtained by the use of a mixture of substitutes.

Include recipe in exhibit. Cost of entire recipe \_\_\_\_\_  
 How many loaves like this sample will the recipe yield \_\_\_\_\_  
 Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

General appearance .....	15
Size	
Shape	
Crust	
Palatability . . . . .	50
Odor	
Taste	
Texture . . . . .	30
Porosity	
Lack of moisture	
Color . . . . .	5
	100

## WHEATLESS QUICK BREADS

Include recipe in exhibit. Cost of entire recipe \_\_\_\_\_  
 What quantity like sample will recipe yield \_\_\_\_\_  
 Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

General appearance .....	15
Crust	
Shape	
Size	
Palatability .....	50
Texture .....	35
Lightness	
Lack of moisture	
Tendency to crumble	
	100

## SPONGE OR LOAF CAKE

Include recipe in exhibit. Cost of recipe \_\_\_\_\_

Time required to mix and bake \_\_\_\_\_

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

General appearance .....	10
Shape	
Way exhibited	
Flavor .....	40
Lightness .....	10
Crumb .....	30
Tendency to crumble	
Moisture	
Tenderness	
Crust .....	10
	100

NOTE: Chocolate cake is one in which chocolate is incorporated in the dough and not a white cake with chocolate icing.

## LAYER CAKE

Include recipe in exhibit. Cost of recipe \_\_\_\_\_

Time required to mix and bake \_\_\_\_\_

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

General appearance .....	10
Flavor .....	30
Lightness .....	10
Crumb .....	25
Tendency to crumble	
Moisture	
Tenderness	
Crust .....	10
Filling .....	15
Flavor (choice as to blending with taste of cake)	
Absence of sugar	
Texture	
	100

## COOKIES

Include recipe in exhibit. Exhibit six on a plate. Cost of entire recipe \_\_\_\_\_ How many cookies like the sample will the recipe yield \_\_\_\_\_

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_ Kind \_\_\_\_\_

## SCORE

General appearance .....	15
Size	
Shape	
Uniformity	
Flavor .....	45
Texture .....	30
Hard, soft	
Tendency to crumble	
Absence of grittiness	
Baking and crust .....	10
	<hr/>
	100

## CANNED VEGETABLES

Underline method of canning used: open kettle, hot water bath (single period or intermittent), steam pressure.

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

Name of Vegetables \_\_\_\_\_

## SCORE

Vegetable .....	85
Condition of product when canned.....	15
Condition of finished product.....	20
Color .....	15
Flavor .....	35
Pack .....	15
Neatness and uniformity.....	10
Proportion of vegetable to liquid.....	5
	<hr/>
	100

## CANNED FRUIT

Underline method of canning used: open kettle, hot water bath (single period or intermittent), steam pressure.

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

Name of fruit \_\_\_\_\_

Proportion of sugar substitute used \_\_\_\_\_

## SCORE

Fruit .....	50
Condition .....	10
Color .....	10
Flavor .....	30
Sirup .....	30
Color, clearness .....	10
Quality .....	10
Flavor .....	10
Pack .....	20
Neatness and uniformity of pack.....	10
Proportion of fruit juice.....	10
	<hr/>
	100

## JELLY

Owing to the scarcity of sugar, probably less jelly will be made than formerly. Corn sirup can be substituted successfully for part of the sugar in jelly-making. If exhibited, the jelly should be in glasses or containers from which it can be turned out whole. "Ideal fruit jelly is a beautifully colored, transparent, palatable product obtained by so treating fruit juice that the resulting mass will quiver, not flow, when removed from its mold; a product with texture so tender that it cuts easily with a spoon, and yet so firm that the angles thus produced retain their shape; a clear product that is neither sirupy, gummy, sticky, nor tough; neither is it brittle and yet it will break, and does this with a distinct, beautiful cleavage which leaves sparkling characteristic faces. This is that delicious, appetizing substance, a good fruit jelly.<sup>1</sup>"

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_ Kind \_\_\_\_\_

Proportion of sugar substitute used \_\_\_\_\_

SCORE<sup>1</sup>

Choice of fruit for jelly-making.....	5
Color . . . . .	10
Clearness . . . . .	10
Absence of crystals . . . . .	5
Texture . . . . .	30
Taste or palatability . . . . .	40
	100

## PRESERVES AND CONSERVES

The preserved product should retain as nearly as possible the original shape, appearance, and flavor of the fresh fruit. Two essentially different parts can be distinguished—the fruit, which appears clear, and the juice. A conserve is a preserve made from a mixture of fruits. Nuts are usually added.

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_ Kind \_\_\_\_\_

Proportion of sugar substitute used \_\_\_\_\_

## SCORE

Fruit . . . . .	60
Appearance, color, and clearness.....	10
Flavor . . . . .	25
Texture . . . . .	15
Uniformity and neatness of pack.....	10
Juice or sirup . . . . .	40
Clearness and color.....	10
Flavor . . . . .	15
Consistency . . . . .	10
Proportion of juice . . . . .	5
	100

<sup>1</sup>N. E. Goldthwaite, "The Principles of Jelly-Making," University of Illinois Bulletin No. 31, Vol. XI.



## JAMS AND BUTTERS

Jams are made from whole fruits, usually the small ones, so prepared as to give a homogeneous mixture. Butters are made from fruits which contain a larger proportion of fleshy material and the seeds and skins are discarded. This mixture is smoother than the jam mixture.

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_ Kind \_\_\_\_\_

Proportion of sugar substitute used \_\_\_\_\_

## SCORE

Homogeneity or smoothness .....	25
Flavor .....	35
Consistency and texture.....	30
Color .....	10
	100

## MARMALADES

The fruit pulp in marmalade does not form a smooth consistency. The fruit is cooked until it is somewhat clear, and the partly congealed sirup or juice may be clear.

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_ Kind \_\_\_\_\_

Proportion of sugar substitute used \_\_\_\_\_

## SCORE

Evenness of distribution of material.....	15
Flavor .....	35
Consistency and texture.....	25
Clearness .....	15
Color .....	10
	100

## RELISH

This includes finely chopped pickled products.

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_ Kind \_\_\_\_\_

## SCORE

Appearance .....	25
Attractiveness of pack, garnish	
Size and uniformity of pieces	
Choice and proportion of materials.....	15
Flavor .....	35
Texture .....	25
Crisp yet tender	
	100

## PLAIN VEGETABLE PICKLES

Sweet, sour, and dill

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_ Kind \_\_\_\_\_

## SCORE

Appearance . . . . .	25
Color, size, and shape	
Uniformity, pack	
Flavor . . . . .	35
Texture . . . . .	35
Crisp and firm, not tough or soft	
Proportion of pickle to liquid . . . . .	5
	100

## SWEET FRUIT PICKLES

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_ Kind \_\_\_\_\_

## SCORE

Fruit . . . . .	75
Appearance . . . . .	10
Flavor . . . . .	35
Texture . . . . .	30
Sirup . . . . .	20
Clearness . . . . .	10
Consistency . . . . .	10
Pack . . . . .	5
	100

## BUTTER

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

SCORE<sup>1</sup>

Flavor . . . . .	45
Body . . . . .	25
Color . . . . .	15
Salt . . . . .	10
Package . . . . .	5
	100

<sup>1</sup>College of Agriculture, University of Illinois

## LUNCH BOX

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

General outward appearance .....	10
Neatness of package .....	
Packing .....	20
Neatness, separate wrapping, and arrangement .....	
Selection of food .....	35
Suitability .....	
Food value .....	
Quality and preparation of food .....	35
	<hr/>
	100

## GARMENTS

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

Suitability of dress to purpose .....	50
Material .....	20
Hygienic quality .....	
Wearing quality .....	
Suitability to purpose and individual .....	
Texture .....	
Weave .....	
Design of fabric .....	
Color .....	
Design .....	30
Suitability to individual .....	
Line .....	
Proportion .....	
Harmony .....	
Color .....	
Hygiene .....	
Construction .....	50
Pattern lines .....	15
Finishes .....	20
Stitching .....	
Seams .....	
Gathers .....	
Bindings .....	
Facings .....	
Hems .....	
Fastenings .....	
Ease of adjustment .....	5
General appearance .....	10
Cleanliness .....	
Pressing .....	

---

100

## HAND WORK

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

Suitability of article to purpose .....	30
Suitability of materials .....	20
Fiber	
Weave	
Size of thread	
Color	
Design .....	25
Adaptation of design to area decorated	
Conformity of design to flat surface	
Conventionalization	
Appropriateness of design to material	
Subordination of design to purpose of article	
Quality of rhythm, harmony, balance	
Workmanship .....	25
Stitch	
Beginning	
Joining	
Finish	
Tension	
Size	
Accuracy in execution	
Cleanliness	
Pressing	

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 100

## PATCHING AND DARNING

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

Materials .....	40
Suitability of materials applied .....	30
Weight	
Weave	
Design	
Color	
Kind and weight of thread .....	10
Workmanship .....	60
Method .....	15
Stitch .....	15
Size	
Tension	
Direction	
Accuracy .....	15
Matching of weave	
Matching of design	
Neatness of finish.....	15

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 100

## WINDOW ARRANGEMENT

A window has three reasons for being: to admit light, to aid in ventilation by providing an inlet and an outlet for air, and to provide an attractive outlook.

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

Photograph from inside showing outlook.....	25
Model showing curtaining material and mode of hanging.....	35
Model showing screening and arrangement of sash for circulation of air .....	40
	<hr/>
	100

## HOMEMADE SHOWER BATH

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

General appearance .....	10
Efficiency of shower.....	55
Force	
Spray	
Quantity of water	
Ease of manipulation.....	20
Drain .....	15
	<hr/>
	100

## ICELESS REFRIGERATOR

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

General appearance .....	10
Effectiveness .....	60
Kind of material	
Circulation of air	
Ease of manipulation.....	20
Drain .....	10
	<hr/>
	100

## HOMEMADE FIRELESS COOKER

It is advisable to use the fireless cooker where practicable to save fuel.

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

General appearance .....	10
Heat-holding power .....	60
Kind, amount, and packing of nonconducting material	
Soapstone or heaters	
Nest-lining and cooking vessel.....	20
Suitability, material, size	
Ease of manipulation .....	10
	<hr/>
	100

## ARBOR AND GARDEN SEAT OR TRELLIS FOR VINES

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

Working drawings showing dimensions.....	20
Estimate of material as to quantity.....	10
Estimate of material as to cost.....	10
Record of time required for making.....	10
Exhibit of finished product or a photograph of it as used.....	50
Suitability to purpose	
Harmony with surroundings	
Workmanship, beauty of design	
	—
	100

## BABY PEN

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

Working drawings .....	20
Estimate of material as to quantity.....	10
Estimate of material as to cost.....	10
Estimate of time required for making.....	10
Finished product, as to—.....	50
Comfort	
Ease of moving	
Neatness of finish	
	—
	100

## FLY TRAPS

Entry \_\_\_\_\_ Class \_\_\_\_\_ Number \_\_\_\_\_

## SCORE

Estimate of material, as to quantity and cost.....	15
Record of time required for making.....	10
Efficiency for catching and holding flies.....	50
General appearance and neatness of finish.....	15
Ease of manipulation.....	10
	—
	100

If the foregoing suggestions are followed out in the planning and conducting of fairs, the exhibits will be of real value in helping to win the war and in raising the standard of home and community life. Ideals such as these, and not the mere winning of premiums, should be the determining factor in all community enterprises. If such standards are not to be maintained at a time like this, there can be no reason for the expenditure of materials, time, and money for exhibits.

UNIVERSITY OF ILLINOIS

# Agricultural Experiment Station

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URBANA, ILLINOIS, JANUARY, 1918

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CIRCULAR No. 209

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## SHALL I PLANT A GARDEN THIS YEAR?

BY J. W. LLOYD, CHIEF IN OLERICULTURE

It may seem to be rather an inopportune time to be thinking of planting a garden when the winter wind is howling about the house and the ground is solidly frozen. Yet time passes rapidly, and unless some thought is given the garden in winter, the season for planting will find us unprepared. If we expect to have good gardens this year, now is the time to make definite plans to that end.

One of the advantages, from a personal standpoint, of having a good home garden, is that it can be made to furnish a continuous supply of vegetables for the table thruout the season. Furthermore, vegetables of the best quality can be supplied to the owner of a garden at a minimum expense and in a much fresher condition than if purchased in the market. At the present time, however, the personal advantages to be gained from a home vegetable garden are much less important than our duty to the nation. The substitution of vegetables for some of the more concentrated foods in the diet of those who remain at home will release for the use of the American army and the Allies large quantities of cereals, meats, and other food supplies that are readily transported because of their more concentrated form. And the substitution of homegrown vegetables for those shipped in from a distance and handled thru the market will reduce the amount of transportation necessary to supply food for the folks at home, and thus will assist in relieving the car shortage, and enable the railroads to use their equipment in the way that will best serve the interests of the entire nation.

It seems, then, that both from the standpoint of personal advantages and of patriotic duty every one who can should plant a garden this year. It should be remembered, however, that *planting* is only the initial step in gardening. Many gardens planted in hope and enthusiasm last year were utter failures; many planted this year are likely to be failures also, unless the people who plant them realize that gardens require continued care. The two great causes of failures in home gardens are the lack of knowledge of the cultural requirements of the different vegetables, and the lack of sustained interest in the garden thru the season. Too many beginners at gardening are filled with enthusiasm in the balmy days of spring, and proceed to plant, plant, plant, without giving due consideration to the tasks that are to follow under the blistering heat of the summer sun. Their interest wanes with the increasing length of the days, and their crops become choked with weeds and are attacked by beetles and blight. What started out as a garden becomes a waste; and the owner's enthusiasm for gardening is likely to be forever dampened.

The logical thing for a prospective gardener to do is to make a definite decision to give his garden consistent care thruout the whole season, and then to let nothing move him from that determination. In order to give his garden proper care, he must know what to plant in his particular locality and when to plant it. He must know which varieties will best meet his needs. He must know what insects and diseases to expect and how to combat them. The more he can learn about each of the crops he proposes to grow before he attempts to grow it, the better prepared for the season's tasks he will be.

It is none too early to begin preparations for this year's gardening. There are three things which should be done **now**:

(1) Bulletins and circulars and books on gardening should be read, and as much as possible learned about the various crops that are to be grown.<sup>1</sup>

<sup>1</sup>The following publications of this station on various phases of vegetable gardening are available at the present time, and may be procured free of charge by addressing the Illinois Agricultural Experiment Station, Urbana, Illinois.

- Bulletin 144 Growing Tomatoes for Early Market
- “ 155 Fertilizer Experiments with Muskmelons
- “ 174 An Efficient and Practicable Method for Controlling Melon Lice
- “ 175 Experiments in Onion Culture
- “ 184 Tests with Nitrate of Soda in the Production of Early Vegetables
- “ 188 Methods of Fertilizing Sweet Potatoes
- Circular 139 How to Grow Muskmelons
- “ 173 Onion Culture
- “ 182 The Fertilizer Problem from the Vegetable Grower's Standpoint
- “ 198 Home Vegetable Gardening
- “ 200 Possibilities of the Fall Vegetable Garden
- “ 201 Dried Bean Production in Illinois



(2) Seed catalogs should be procured, and a list made of varieties and quantities of seeds needed. If an order is placed for the seeds now, there will be no delay waiting for the seeds at planting time, or substitution of undesirable varieties in order to procure the seeds in a hurry.<sup>1</sup>

(3) A definite plan of the proposed garden should be made on paper. This plan should indicate the location of each kind of vegetable in the garden, the distance between the rows, and the approximate time of planting each crop. Since a home garden is a personal matter, the plans made by different individuals will reflect their particular tastes. However, in all garden plans, it is desirable that an arrangement of the crops be employed which will make the best possible use of the available space and at the same time minimize labor in preparation and care. Suggested plans are given in Figs. 1 and 2. Plans for gardens of various sizes are also given in Circular 198 of this station.

<sup>1</sup>A list of desirable varieties is contained in Circular 198.

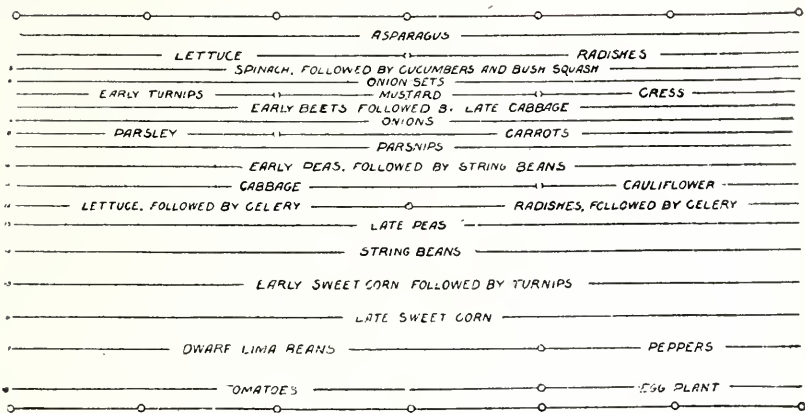


FIG. 1.—DIAGRAM OF A SUBURBAN GARDEN 30 FEET BY 60 FEET

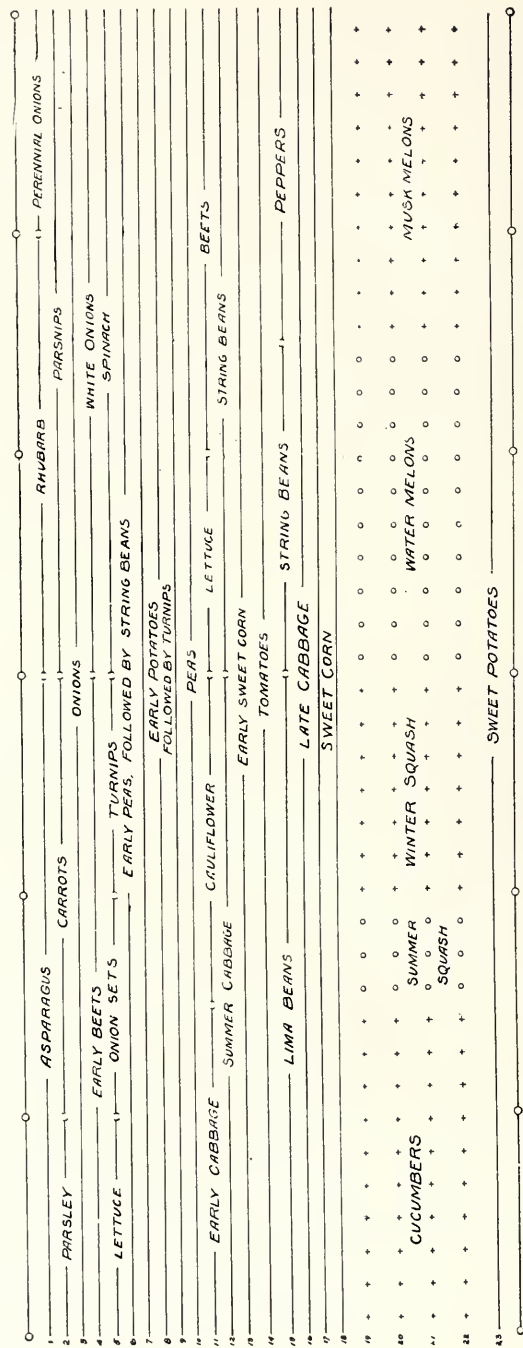


FIG. 2.—DIAGRAM OF A FARMER'S VEGETABLE GARDEN 90 FEET BY 240 FEET

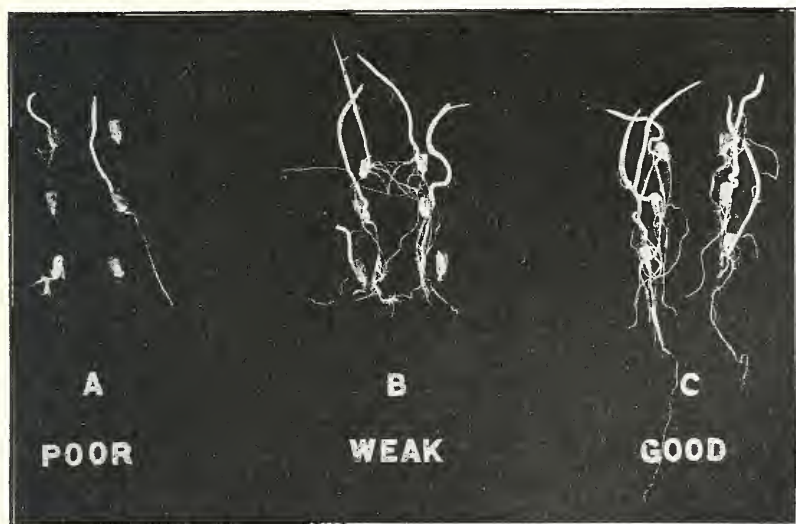
UNIVERSITY OF ILLINOIS  
Agricultural Experiment Station

URBANA, ILLINOIS, JANUARY, 1918

CIRCULAR No. 211

THE SEED-CORN SITUATION FOR 1918

By W. L. BURLISON AND GEORGE H. DUNGAN



GERMINATION TESTS

A—A poor germination. The ear from which these kernels came should be thrown into the feed crib.

B—A test that indicates weakness. In a year of seed scarcity this ear may be as good as the average. A second set of kernels should be tested.

C—A good eight-day test.

# THE SEED-CORN SITUATION FOR 1918

BY W. L. BURLISON, ASSOCIATE PROFESSOR OF CROP PRODUCTION, AND  
GEORGE H. DUNGAN, ASSISTANT IN CROP PRODUCTION

The seed-corn situation in Illinois is the most serious in the history of the state. Seed corn is scarce. Many counties will be unable to supply their own seed. This means that large quantities must be brought in from other localities. Much has been published to discourage shipping seed in from distant sections, for in most cases marked differences in soil and climate result in poor yields from the imported seed. The general rule has been not to recommend the use of the imported seed corn, but the application of this rule can be carried too far even in normal times, and during the present critical condition which confronts the Illinois producer, a more liberal attitude must be assumed if seed corn is to be available for all who wish to plant this crop next May.

For the present season, seed must be shipped from central or more southern counties to areas in the northern part of the state. The University of Illinois has some specific data bearing on the movement of corn from Urbana, Champaign county, in central Illinois, to DeKalb, DeKalb county, in northern Illinois, a distance of 125 miles in latitude. These figures are submitted because they seem to have a value in throwing light upon the question whether imported seed may be expected to produce satisfactory results. The soils on which this corn was grown are very similar. Both would be considered very good corn land. The original seed was produced near Urbana and sent each year to DeKalb for planting.

COMPARATIVE YIELDS OF CORN GROWN AT URBANA AND AT DEKALB FROM SEED  
PRODUCED NEAR URBANA, ILLINOIS  
(Bushels per acre)

Variety	Years compared	Urbana	DeKalb
Reid's Yellow Dent.....	1908-1913, 1915	57.8	57.9
Leaming.....	1908-1913	56.5	59.2
Riley's Favorite.....	1912-1916	56.6	54.5
Silvermine.....	1907-1914	56.9	57.9
Illinois High Ear.....	1907-1915	43.2	41.5
Illinois Low Ear.....	1907-1915	51.3	49.9

It will be observed from the above figures that the yields for Urbana and DeKalb vary but slightly, and in the present emergency these differences would appear negligible. At DeKalb, however, the corn is not always so well matured as at Urbana.

The score card, which has often been used as a guide in selecting seed corn, must be discarded for this season.

Practical experience and the results of investigation have shown that fancy points are not necessarily associated with high yield. The University of Illinois has figures which seem to show that small ears selected from the crib may yield about as much as larger ears. *It should be kept in mind that these figures are based on crib selection, and that this method is not to be recommended in normal years.*

This year in order to get corn that will grow it will be necessary to disregard many of the points which have been considered important. If necessary, we must sacrifice everything for strong, vigorous germination.

From every section of the state reports have been received which indicate that most of the corn saved for seed is very low in germination. This means that in most cases **every ear of seed must be tested**, altho if a composite test shows a germination of 95 percent the individual ear test is not very important. This composite test may be made as follows:

Go thru the crib and pick out 100 ears which would ordinarily be considered fit for seed; select six kernels from the ears according to the method described later under the rag-doll test, and place them in some sort of a germinator. If, by the above method, a test of 95 percent is obtained (at least 570 kernels showing good germination), further examination of the corn in this respect will be unnecessary.

It is probable, however, that very little corn will be acceptable by the composite test. Therefore, the individual ear test will be found necessary. This means that every ear must be tried for germination. There are numerous methods of applying this individual ear test, and there are many kinds of commercial testers on the market, but homemade devices are as good as those which cost money. Two general types of homemade testers and general suggestions for their management are described below.

### THE RAG-DOLL TESTER

The rag-doll tester is suggested for the following reasons:

1. It will, if properly handled, give a reliable index of the vitality of seed corn.
2. It is cheap and easily made.
3. It is simple in operation, and takes no more time than other more expensive testers.
4. As a rule, there is little difficulty experienced with molds which develop in certain other testers.
5. It is easily disinfected.
6. Counting the grains is less difficult, because the entire kernel with its roots can be observed.
7. The rag-doll tester is small, and "dolls" can be stored away in a limited space.

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NOTE.—The rag-doll tester was first used and described by the Iowa Agricultural Experiment Station.

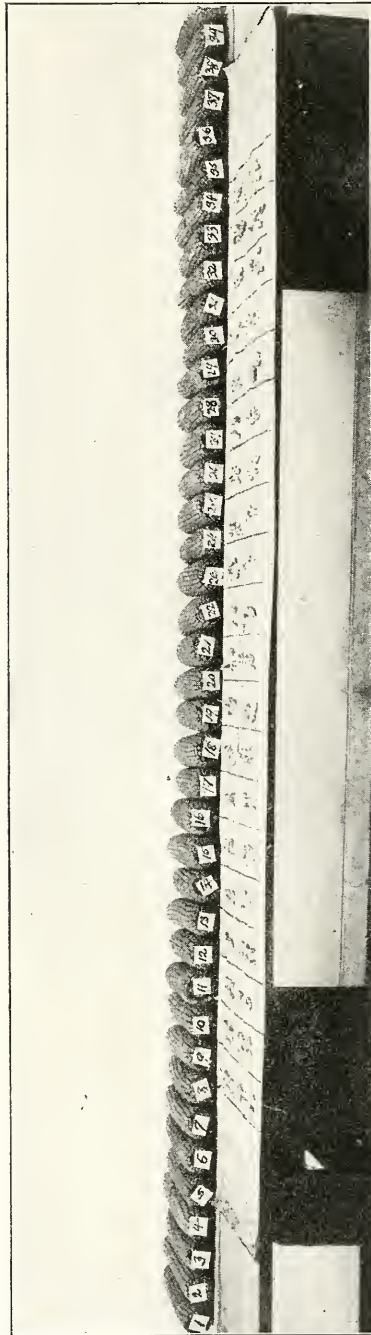


FIG. 1.—A RAG-DOLL TESTER UNROLLED, SHOWING THE RESULT OF SEVEN-DAY GERMINATION TEST. THE EARS ARE NUMBERED TO CORRESPOND WITH THE NUMBERS OF THE DIVISIONS ON THE TESTER

*Making the Tester.*—Cut common muslin into strips 5 to 7 feet long and 10 inches wide. Hem the edge in order to prevent raveling. Then leaving at each end an unmarked area 8 to 10 inches deep, divide the strip of cloth down the center with a heavy line which cannot be easily erased and which will not blur upon wetting. Mark this area off into rectangles 3 inches wide and 5 inches long by crossing the center line perpendicularly with lines 3 inches apart. The tester is now ready for filling.

*Arranging the Ears.*—Place the ears in a convenient location where they will not be disturbed. The ears should be numbered to correspond with the squares in the tester. These may be placed in consecutive order on a table, but numbering them is better. (See Fig. 1)

*Preparing the "Doll" for the Test.*—First dip the tester in water, then wring gently, and spread it on a table of convenient height for comfortable work. The cloth when slightly moist will be more easily handled, and the grains will not slip about on the tester before it is rolled up.

*Removing and Placing the Kernels.*—Six kernels from each ear should be used in each division of this tester. The grains should be placed germ-side up, and all the tips should point in the same direction in order to make possible the rapid reading of results at the end of the test. Remove one grain about two inches from the butt. Turn the ear one-fourth around and remove a kernel from the middle of the ear. Turn the ear again one-fourth around in the same direction as before and remove a grain two inches from the tip. Holding the ear in the same position, remove a kernel about two inches from the butt. Turn the ear and repeat the above operation, taking a kernel from the middle and one two inches from the tip. Thus, when the ear has been turned around once, six kernels will have been removed: two from the butt, two from the middle, and two from the tip; and each of the two grains from the butt, the middle, and the tip will have come from opposite sides of the ear.

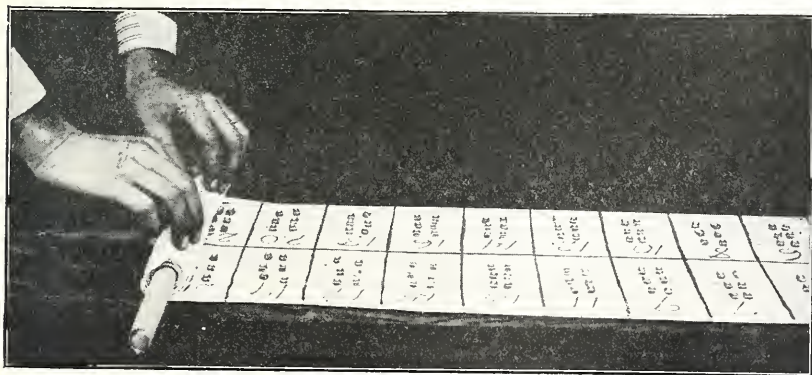


FIG. 2.—THE TESTER SHOULD BE ROLLED FIRMLY BUT NOT TIGHTLY AROUND A STICK OR SMALL CARDBOARD MAILING TUBE AS A CORE

*Rolling the "Doll" and Germinating the Corn.*—Roll the cloth, with the grains, firmly but not tightly around a stick or a small piece of wire screening, bent in the form of a cylinder, for a core (Fig. 2). Place around each end, and the center if desired, a string or a rubber band (Fig. 3). Place the roll in a bucket of water with a temperature of about 80° F., and let it remain for about ten or fifteen hours. At the end of this period, pour off the water and store the tester in a warm room. A box, a bucket, or a moist sack may be placed



FIG. 3.—THE RAG DOLL ROLLED AND READY FOR SOAKING

over the roll so that it will not dry out, but some allowance should be made for ventilation. A number of "dolls" may be used at the same time, making it possible to test a large quantity of corn quickly. It requires about two yards of 36-inch muslin to each  $1\frac{1}{4}$  bushels of corn tested.

At the end of five to eight days the count may be made and the germination test recorded.

*Observing Results and Discarding Ears.*—Untie the string, or slip off the rubber bands, and unroll the doll carefully so that no kernels



are displaced. Note the germination of the kernels in each rectangle and count those good that show strong, vigorous shoots and roots from all six kernels (see illustration on front cover). Ears showing one or two kernels with weak shoots and roots should be discarded or laid out and retested. If the same results are obtained in the second test, the ear should be discarded. All ears in the test that show more than two kernels with weak shoots and roots should be thrown out at once. If only one kernel of the six from any one of the ears fails to grow, and the others are good, the ear should be retested; but if no better results are obtained in the second test, the ear should be thrown into the feed crib. All ears with more than one dead kernel among the six kernels in the test should be thrown out immediately.

*After Each Test* the cloth should be sterilized by boiling, in order to guard against trouble with molds when using it again.

### THE SAWDUST AND THE SAND-BOX TESTER

*The Sawdust Box* is a favorite type of tester. Construct a box 24 by 30 inches, and 3 inches deep, inside measurements, and fill to within an inch of the top with sawdust which has been thoroly moistened. It is best to soak this material for 10 to 12 hours before placing it in the test box. When the sawdust is put into the container, pack it firmly and smooth it down even, to within about one inch of the top. Place stout muslin over the sawdust and tack it securely to the edges of the box; then rule it into 2-inch squares. Number the squares, and then take from each ear six grains as described for the rag-doll method, and place them on the squares, being careful that they are placed on numbers corresponding to the numbers of the ears from which they have been taken. Put these ears away where they will not be disturbed.

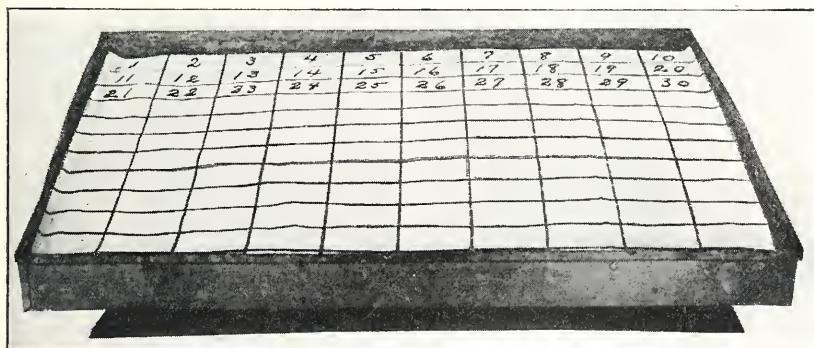


FIG. 4.—THE SAWDUST BOX IS A FAVORITE TYPE OF TESTER

When the box is filled, cover the grains with a clean cloth, and moisten cloth and grain. Place moistened sawdust over the top, and if this material should become somewhat dry it should be moistened as occasion demands.

After six to eight days at room temperature, a count may be made and all poor ears discarded. The same rigid method of elimination must be followed here as indicated for the final count and rejection in the rag-doll test.

*The Sand Box* is very commonly used by corn growers. It is made in the same way as that indicated for the sawdust box, the only difference being that sand is employed instead of sawdust. The sand is moistened before the grains are put in place. The grains are usually pushed into the sand point downward, or they may be pressed into the sand with the germ side up. Glass may be put over the tester, in which case the germination and growth of the grains may be observed. More frequently, however, layers of moistened cloth are put over the sand. The grains from different ears are kept separate by means of wires. It is suggested that sand gives a more even moisture supply and more even temperature than sawdust.

### CHOICE OF VARIETY

*For Northern Illinois.*—Continued tests have shown that for northern Illinois the leading high-yielding varieties which have been grown for a minimum of four years are Western Plowman, Riley's Favorite, Griffith's Early Dent, Reid's Yellow Dent, Hecker's Red, and Funk's 90 Day.

*For Central Illinois.*—At Urbana, seventeen varieties of corn have been under test for five years or more. Reid's Yellow Dent, Boone County White, Leaming, Silvermine, Riley's Favorite, Champion White Pearl, Golden Eagle, Farmer's Interest, Johnson County White, and Beatty's Yellow are all high-yielding strains.

*For Southern Illinois.*—On well fertilized land in southern Illinois, the leading high yielding varieties tested for a minimum of four years are Funk's 90 Day, Reid's Yellow Dent, Perrine's White Pearl, Chinese Poor Land, Grave's Yellow Dent, Champion White Pearl, and Silvermine. On unfertilized land, Champion White Pearl, Perrine's White Pearl, and Esterly's White have been the highest yielders for three years.

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For a further discussion of varieties, see Bulletin 191 of the Illinois Agricultural Experiment Station. Early varieties should be selected when the crop is to be grown for grain alone. Later maturing varieties may be seeded for silage. This will help to make the best use of early varieties, which must be used in the northern part of the state and the supply of which at best is very limited.

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FEBRUARY, 1918

EXTENSION CIRCULAR No. 19

UNIVERSITY OF ILLINOIS  
COLLEGE OF AGRICULTURE

EXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS  
IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE  
W. F. HANDSCHIN, VICE-DIRECTOR

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URBANA, ILLINOIS

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## THE RAG-DOLL TESTER FOR CORN

BY W. L. BURLISON AND GEORGE H. DUNGAN



THE RAG DOLL ROLLED AND READY FOR SOAKING

## TO CLUB MEMBERS IN ALL PROJECTS

Many of you, perhaps, have read the story of the Leak in the Dike, and how Peter, the lad in far away Holland, saved his country by putting his arm into a little hole in a dike and stopping the leak. The dike in Holland is, as you know, all that stands between that country and destruction. If the dike should give way, the ocean would sweep in and death and devastation would follow.

Our own country, the United States, at the present time stands in much the same position as does Holland. Instead of a threatening ocean of water, we are menaced by a sea of German autoeracy. Did you ever think what would be the result if it should engulf us? Do you know that it would sweep away the things that are nearest and dearest to the hearts of every American boy and girl?

Like Holland, we are protected by mighty dikes—our army and our navy. But the mightiest dike of them all is FOOD. During the past year you have done your bit in producing FOOD. It may not seem to you that you have done very much, but every ounce of food produced in garden, field, or feed yard has helped to build the dike. Now a leak has been discovered. Will you, like Peter, help to stop it?

Our corn crop, the pride of Illinois, is threatened unless good seed can be obtained. It can be obtained only by picking over and testing ear by ear the corn which has been gathered. Every untested ear that is planted is a leak in the dike, and every club member who tests an ear of corn, whether he plants it or whether someone else plants it, is stopping a leak in the dike.

This little circular will tell you how to go about this. It is placed in your hands with the hope that whatever your club interest may be, wherever you may live, whether in the city or in the open country, you may see this opportunity for patriotic service.

Uncle Sam has done a great deal for club boys and girls. Here is a chance to do something for him. Take this up in your club meetings, and talk with your club leader. See if there is not some way of cooperating with the farmers in your neighborhood in this work. Then when this great conflict is over, other boys and girls may read your story as you have read Peter's.

JAMES H. GREENE  
STATE LEADER IN JUNIOR EXTENSION  
COLLEGE OF AGRICULTURE  
URBANA, ILLINOIS

## THE RAG-DOLL TESTER FOR CORN

BY W. L. BURLISON, ASSOCIATE PROFESSOR OF CROP PRODUCTION, AND  
GEORGE H. DUNGAN, ASSISTANT IN CROP PRODUCTION

The seed-corn situation was never so serious in Illinois as it is the present season of 1918. Corn was injured last fall in practically every section of the state by very early frost, and for this reason very little mature seed was selected from the field. Reports on the germination tests this year are very discouraging. The vitality of corn probably has never been so unsatisfactory.

It will be necessary to make germination tests of every ear which is to be planted this spring. There are several methods of doing this, but the simplest and least expensive one is by means of the rag-doll tester. This plan is suggested for boys' and girls' clubs for the following reasons:

1. It will, if properly handled, give a reliable index of the vitality of seed corn.
2. It is cheap and easily made.
3. It is simple in operation, and takes no more time than other more expensive testers.
4. As a rule, there is little difficulty experienced with molds which develop in certain other testers.
5. It is easily disinfected.
6. Counting the grains is less difficult, because the entire kernel with its roots can be observed.
7. The rag-doll tester is small, and "dolls" can be stored away in a limited space.

**Making the Tester.**—Cut common muslin into strips 5 to 7 feet long and 10 inches wide. Hem the edge in order to prevent raveling. Then leaving at each end an unmarked area 8 to 10 inches deep, divide the strip of cloth down the center with a heavy line which cannot be easily erased and which will not blur upon wetting. Mark this area off into rectangles 3 inches wide and 5 inches long by crossing the center line perpendicularly with lines 3 inches apart. Make a mark on the back of the doll in the upper left-hand corner to indicate the top after it is rolled up. The tester is now ready for filling (see Fig. 1).

**Arranging the Ears.**—Place the ears in a convenient location where they will not be disturbed. The ears should be numbered to correspond to the squares in the tester. These may be placed in

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NOTE.—The rag-doll tester was first used and described by the Iowa Agricultural Experiment Station.

1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40

FIG. 1.—A RAG DOLL READY TO BE USED

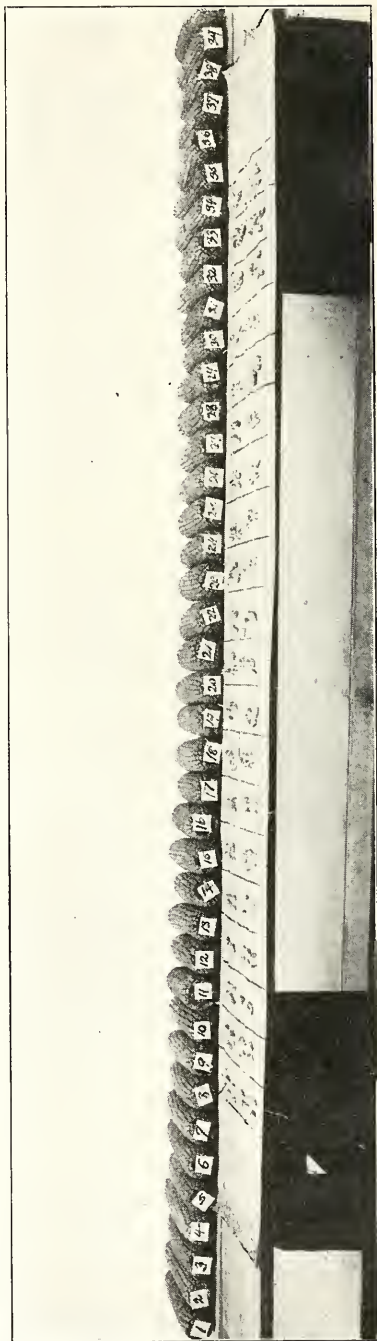


FIG. 2.—A RAG-DOLL TESTER UNROLLED, SHOWING THE RESULT OF A SEVEN-DAY GERMINATION TEST. THE EARS ARE NUMBERED TO CORRESPOND WITH THE NUMBERS OF THE DIVISIONS ON THE TESTER

consecutive order on a table, but numbering them is better (see Fig. 2).

**Preparing the "Doll" for the Test.**—First dip the cloth in water, then wring it gently, and spread it on a table of convenient height for comfortable work. The cloth when slightly moist will be more easily handled, and the grains will not slip about on the tester before it is rolled up.

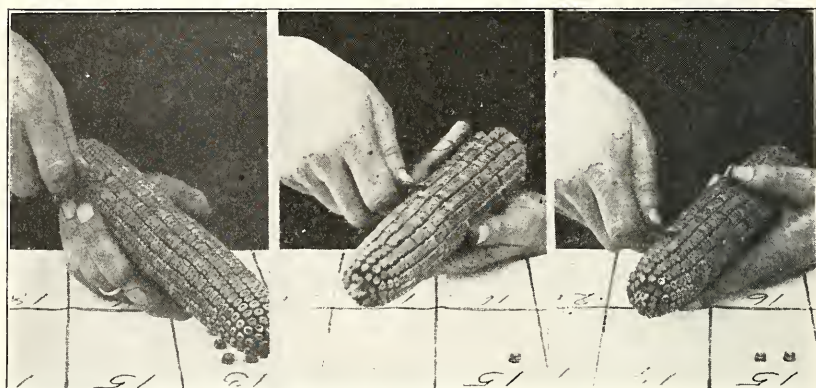
**Removing and Placing the Kernels.**—Six kernels from each ear should be used in each division of this tester. The grains should be placed germ-side up, and all the tips should point in the same direction in order to make possible the rapid reading of results at the end of the test (see Fig. 3). Remove one grain about two inches



FIG. 3.—PLACING THE KERNELS WITH GERM-SIDE UP AND TIPS POINTING IN ONE DIRECTION FACILITATES READING THE TEST

from the butt. Turn the ear one-fourth around and remove a kernel from the middle of the ear. Turn the ear again one-fourth around in the same direction as before and remove a grain two inches from the tip. Holding the ear in the same position, remove a kernel about two inches from the butt. Turn the ear and repeat the above operation, taking a kernel from the middle and one two inches from the tip.

Thus, when the ear has been turned around once, six kernels will have been removed: two from the butt, two from the middle, and two from the tip; and each of the two grains from the butt, from the middle, and from the tip will have come from opposite sides of the ear (see Fig. 4).

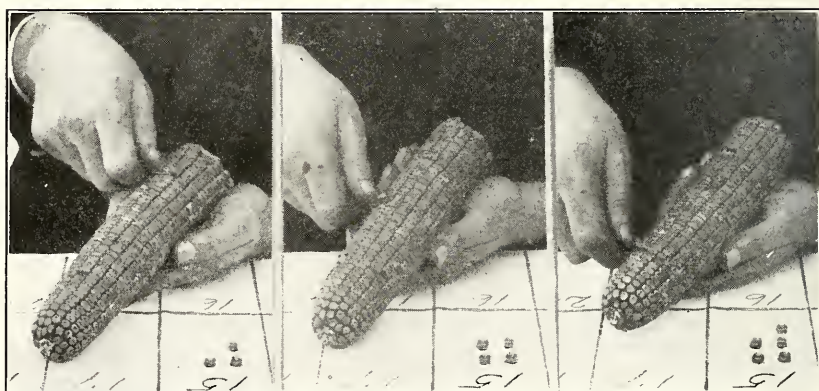


1

2

3

- 1—Remove one grain about 2 inches from the butt  
 2—Turn ear  $\frac{1}{4}$  around and take kernel from middle of ear  
 3—Turn again  $\frac{1}{4}$  around in same direction; take grain 2 inches from tip



4

5

6

- 4—Holding ear in same position, remove kernel 2 inches from butt  
 5—Again turn the ear and remove kernel from middle of ear  
 6—Make one more quarter-turn and take kernel 2 inches from tip

FIG. 4.—REMOVING THE KERNELS FOR TESTING



**Rolling the "Doll" and Germinating the Corn.**—Beginning at the end having the highest numbers, roll the cloth, with the grains, firmly but not tightly around a stick or a small piece of wire screening bent in the form of a cylinder for a core (Fig. 5). Place around each end, and the center if desired, a string or a rubber band (see front cover). Place the roll in a bucket of water with a temperature of about 80°F., and let it remain for ten or fifteen hours. At the end of this period, pour off the water and store the tester top side up in a warm room. A box, a bucket, or a moist sack may

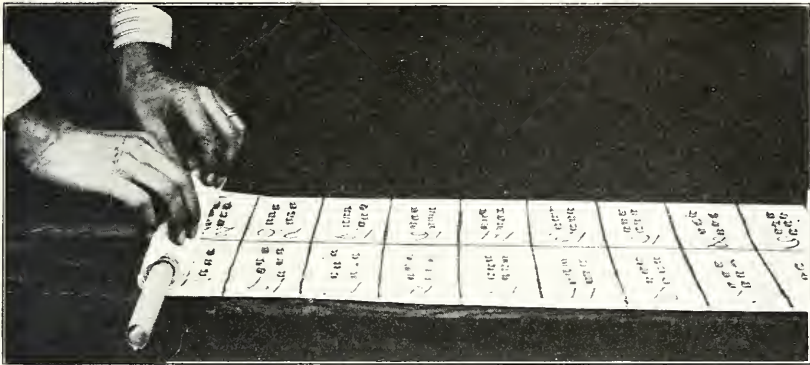


FIG. 5.—THE TESTER SHOULD BE ROLLED FIRMLY BUT NOT TIGHTLY AROUND A STICK OR SMALL CARDBOARD MAILING TUBE AS A CORE

be placed over the roll so that it will not dry out, but some allowance should be made for ventilation. A number of "dolls" may be used at the same time, making it possible to test a large quantity of corn quickly. About two yards of 36-inch muslin is required for each  $1\frac{1}{4}$  bushels of corn tested.

At the end of five to eight days the count may be made and the germination test recorded.

NOTE.—For fuller information concerning Corn Club work, the reader is referred to Extension Circular 7 of the Illinois College of Agriculture. If information concerning the organization and direction of boys' and girls' clubs is desired, it will be found in Extension Circular 5 of the Illinois College of Agriculture. Personal help thru correspondence, conferences, or meetings may be secured thru the State Leader in Junior Extension, College of Agriculture, Urbana, Illinois.

**Observing Results and Discarding Ears.**—Untie the strings, or slip off the rubber bands, and unroll the doll carefully so that no kernels are displaced. Note the germination of the kernels in each rectangle and count those good that show strong, vigorous roots and shoots from all six kernels (see Fig. 6C). Ears with one or two kernels producing weak roots and shoots should be discarded or laid out and retested (see Fig. 6B). If the same results are obtained in the second test, the ear should be discarded. All ears in the test that show more than two kernels with weak roots and shoots should be thrown out at once (see Fig. 6A). If only one kernel of

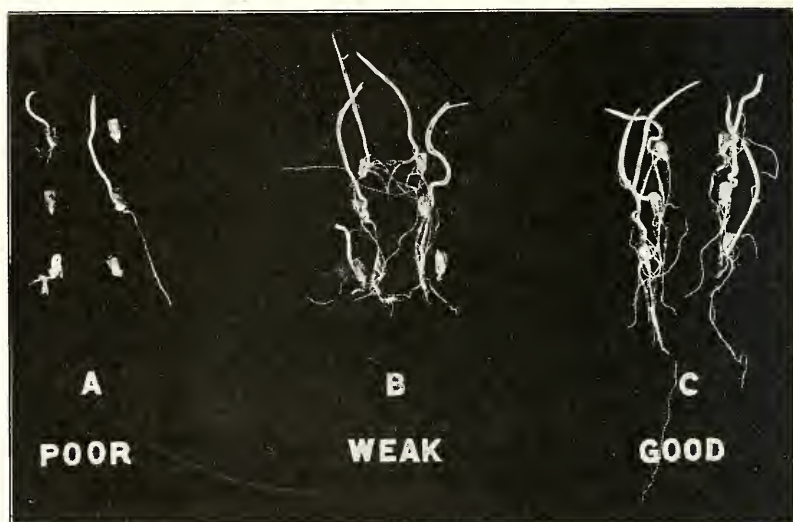


FIG. 6.—GERMINATION TESTS

the six from any one of the ears fails to grow and the others are good, the ear should be retested; but if no better results are obtained in the second test, the ear should be thrown into the feed crib. All ears with more than one dead kernel among the six kernels in the test should be thrown out, immediately.

**Treatment of a Used Doll before Putting in Other Tests.**—Often molds develop during the germination of the corn, and a tester used over and over again will become badly infected with a fungous growth. To prevent this trouble it is advisable, before putting in a new test, to sterilize each “doll” by immersing it for a few minutes in boiling water. By following this practice, the tester may be used again and again and continue to give as good results as a new one.

UNIVERSITY OF ILLINOIS

# Agricultural Experiment Station

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CIRCULAR No. 213

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APPLE FLAKES

By W. P. JAMES

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URBANA, ILLINOIS, MARCH, 1918

# APPLE FLAKES

BY W. P. JAMES, ASSISTANT IN POMOLOGY

Each day the responsibilities of the United States in the World War are increasing. Along with the great task of feeding our own ever-increasing number of soldiers in Europe, we have fallen heir to the supplying of much food for our Allies.

Meat and grain have been rushed to Europe, but very little fruit. Our fruits have not been offered to our Allies, not because of scarcity or lack of supply, but because we could not export them. Where Europe needs fruit the most today is in the trenches. It is in the trenches that life is most strenuous, where a balance of ration is most needed, as only highly concentrated foods are available in most instances. Men in the trenches are begging for fruit, not as a luxury, but as a source of fruit sugar, fruit esters, and acids, to aid in digestion and give a balance of ration.

With this idea of supplying fruit for the army foremost, it was resolved to find a method whereby the apple could be put to use in the trenches in a practical way as an army food.

## INEFFICIENCY OF THE SULFUR-BLEACHED APPLE AS A WAR FOOD

The present sulfur-bleached commercially dried apple has fallen so short in retention of natural flavor, color, cell structure, and adequate keeping quality, that it has not even warranted consideration as an army food. On account of the thick slicing, sulfur bleaching, and high moisture content, dried apples, as offered to the public in their present form, are a leathery product, the outer layers of cells having dried first, making it impossible to lower the original percentage of moisture in the inner layer of cells without destroying the chemical and physiological construction of the outer cells. The ready spoiling of the sulfur-bleached apple is doubtless due to fermentation or chemical rearrangement within the cells of the inner layers of the dried fruit, a result of insufficient dehydration accompanied by an increase in temperature.

## PLAN OF EXPERIMENT

At the beginning of this work it was recognized that the four factors of vital importance to be controlled were: (1) percentage of moisture, (2) cell structure, (3) flavor, and (4) color. These

factors were taken up in order of their importance as influencing the use of the product as an army food in Europe.

#### CONTROL OF MOISTURE CONTENT AND CELL STRUCTURE

Apples were sliced and dried in a large-sized tin drier heated by a gas burner placed in the fire box. A current of air was forced thru the drier by one electric fan running continually. The temperature was held at approximately 120° F.; a second fan was connected thru a make-and-break box and pilot lamp, with a thermostat in the drier set at 120° F. to prevent the temperature from running up and causing changes that would prevent the material from ever regaining its original consistency.

Apples in the following forms were put into the drier: whole, halved, quartered, whole-peeled, peeled and halved, peeled and quartered, and peeled and sliced. After two days of constant drying it was found that only the surface layers of cells were dried in each instance. The thickness of the dried surface was approximately the same in all cases, the inner portion of the tissues having retained the original moisture content. As was expected, the portion left covered with the epidermis had dried but little, since the epidermis is almost impermeable to moisture. The difference in the rate of drying is also evident between different varieties, the Ben Davis, for example, drying much more readily than the Winesap under the same treatment.

It was self-evident that the slicing of the apples must be done in such a way as to permit the escape of the cell water of all the layers of cells and yet leave the material capable of taking up water readily and assuming approximately its normal consistency, without marked chemical changes having occurred. In this work an ordinary apple peeler was used, the peeling process being continued until the entire apple was cut into thin, narrow strips. This method, it will be observed, eliminates slicing and coring, and, when operated on a large scale, will greatly reduce labor and the use of extra machinery. Several series, prepared in the manner described, were dried from twelve to fourteen hours under mechanical conditions corresponding to those used in commercial drying. The result was a product dried to a moisture content of 5 to 8 percent, a crisp, flakelike form easily powdered in a mortar. The flakes, when allowed to absorb water equal to the amount driven off, regained approximately their original form, thickness, and consistency.

The keeping quality of the flakes has been demonstrated in two ways. The product has been kept in open packages in a crisp form, at room temperature, for a period of four weeks, without appreciably

absorbing moisture or losing flavor. In closed receptacles, similar samples have been preserved for ten to twelve months without alteration. The low moisture content, in itself, makes it probable that the product will keep, under reasonable conditions, more or less indefinitely. When to this is added the preservative effect of the sugar, the keeping quality of the product seems assured.

#### CONTROL OF COLOR AND FLAVOR

The browning, or undesirable coloring, of apples dried without being bleached, is doubtless due to the naked cell walls and the intercellular spaces coming into contact with the oxygen of the air.<sup>1</sup> By accelerating the action of the enzymes on the disaccharides, the oxygen of the air is in part responsible for the change in the flavor of the product. It follows, therefore, that any control of browning by a method which protects the exposed cell walls and intercellular spaces from the air will also tend to prevent to a marked degree the change in flavor, or chemical rearrangement of the cell, which otherwise results. In preserving the color of the commercial sulfur-dried apples by bleaching rather than by the protection of the exposed intercellular spaces and cells, there is a marked loss of flavor.

In previous investigations by the writer, no difference in coloring was observed whether drying took place in the light or in the dark. However, a photo-chemical change occurs when the fruit is dried in direct sunlight: there is first a slight browning, then the photo-chemical change, which gives the original light color, the product later turning brown again.

The use of a one-percent solution of commercial salt as a dip to prevent discoloring in drying has been recommended for some time in vegetable drying. Dipping the apples in various solutions of salt was therefore first tried. It was found that the original color of the fruit could be retained by dipping the apple, when prepared for the drier, in a salt solution. Starting with a one-percent solution of salt, it was found that as the concentration of solutions increased, the degree of browning decreased in inverse proportion. With a solution of 30 percent or above, the original apple color was retained.

When distilled water was used it was found that the cell structure was destroyed and a leathery product was obtained which was unable to absorb an amount of moisture equal to that given off. This showed that dipping the product in a less concentrated solution than the cell sap had brought about osmosis and the cells had at

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<sup>1</sup>Whether the browning is due directly to oxidation or to the activating of an oxidative enzyme that acts upon a glucosidal flavone, is of little importance at this time.

first taken up moisture, thus altering the cell content and destroying the tissue structure. By the use of a solution of equal concentration with the cell sap, osmosis would not occur. Then, to use a higher concentration than the cell sap, the osmotic reaction would be reversed, and would seal over the intercellular spaces, and exclude the air. The use of a high percentage solution of salt makes the food of no commercial value, as it gives the undesirable salt taste to the product.

To obtain the same desirable effect on color and to avoid the unpleasant concentrated saline taste, sugar solutions were next tried instead of salt. Different concentrations of sugar solutions gave parallel results with those of salt. A solution ranging from 20 to 30 percent retained the original color of the apple. An acidity test, based on dry matter, showed that the apple had undergone no appreciable change in acidity thru the drying processes.

The use of a sugar solution was therefore immediately taken up as the basis for the control of coloring and the prevention of acidity changes. The sugar of course added to the food value of the product; and as any sugar left in the discarded solution was distilled and recovered, there was no waste whatever. The method of dipping was as follows: The apples were prepared for drying, then placed in the solution of sugar and stirred in order to get the surfaces of all the pieces into contact with the solution, and removed and spread on a drying pan. Enough of a 5-percent solution (5 grams of sugar per 100 cc. of distilled water) was used to give one-tenth of a gram of solution for each gram of prepared apple tissue.



FIG. 1.—LEFT TO RIGHT: COLOR COMPARISON SHOWING THE DECREASE OF BROWNING AS THE PERCENTAGE OF SUGAR USED WAS INCREASED. THE SAMPLE ON THE EXTREME LEFT WAS NOT TREATED

Later a method was discovered whereby the process of dissolving the sugar and then dipping the apples in the solution could be eliminated. When the sugar, in the dry form, was added or mixed with the prepared apple tissue just before the apple was placed in the drying trays, enough cell sap was liberated from the ruptured cells of the apple to dissolve the sugar in a very short time. Even in the case of varieties with low moisture content, as the Grimes, enough

cell sap was present to dissolve 2 grams of sugar per 10 grams of apple tissue. No sugar was lost by dripping, as was the case when sugar was used in solution as a dip. The use of dry sugar had the same effect as dipping upon the color, flavor, and structure of the finished product. The time required for drying was not affected. Another advantage of this method of dry sugaring over the dipping method was that the spreading on the trays was simplified. The sugar did not all dissolve immediately, but part of it adhered to the tissues in the granular form until it went into solution. Then as the sugar went into solution it was equally distributed over the surface of the pieces of apple, even when a very low percentage was used.<sup>1</sup>

Thruout the first part of the work only Grimes apples were available, but later Ben Davis, Winesap, and Jonathan varieties were used. The distinctive flavor of each variety was readily detected in the flakes. The snappy, high-acid, and fruit-ester taste of the Winesap greatly contrasted with the low-flavored taste of the Ben Davis.

### UTILIZATION OF THE PRODUCT

The product having been obtained, what is the most practical way of handling this food for the army?

As the flakes came from the drier, a carton measuring 3x2x1 inches, with paraffin wrapper, was used to hold the crisp and dried product of one apple of the 125-box pack size. It was found that the product from four such apples could be placed in one of these small boxes by breaking up the flakes. The flakes are at present being put up in sample form in these boxes, with 30 grams per box. This is equivalent to approximately 300 grams of apples, without the core or peeling. Thirty grams of dried product in these 3x2x1-inch boxes is equivalent in food value to 492 grams of apples in the bulk, or 4.8 apples measuring 8 inches in circumference. This estimate is based upon comparative weights of peeling, core, and meat as obtained by the use of a small-sized commercial type of peeler.

The question is, How can the apple flakes be used in the trenches or back of the trenches by our armies in Europe at present? Where mess shacks are possible, the product can be utilized either raw—eaten directly from the box—as a breakfast dish, requiring only

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<sup>1</sup>The writer hopes later to make out a percentage table stating the amounts of sugar required to give the different degrees of color and sugar coating desired, basing the computations of the table upon the amount of sugar required per unit weight of bulk apple and taking into consideration the different sized apples as determined by commercial grading. The relative-size phase must necessarily be considered, as the ratio of core and peeling to size of apple decreases as the size of apple increases. Consideration of this phase, as well as of others noted in this work, has been postponed as being of relative unimportance; present effort is directed toward making the product available for army use.



three minutes for the flakes to soften in milk or cream, or it may be used as a sauce, stewed, or in other forms of cooking. Stewing requires practically the same amount of time as the stewing of fresh apples. Put up in small packages containing from 8 to 30 grams, this product may be distributed to the men at the front and eaten direct from the box. With the use of 20-percent sugar solutions the intercellular spaces are filled with sugar; the first taste is of the sugar, followed by the original apple taste or flavor. A 20-percent solution gives a slightly candy-coated product.



FIG. 2.—QUANTITATIVE COMPARISON OF FRESH, FLAKED, AND POWDERED FORMS OF FOUR JONATHAN APPLES, EACH FORM AS ILLUSTRATED CONTAINING THE SAME TOTAL DRY WEIGHT OF APPLE

Tho the flake form seems at present the most logical for army use, as it retains some bulk, three other more highly concentrated forms have been prepared. One is in the form of powder, the flakes being ground into powdered form similar to powdered sugar. This, put up in vials, may be used as a seasoning for puddings, pies, cakes, etc. It is, however, very concentrated. The second form is obtained by pressing the powdered flakes into small capsules similar to the commercial junket capsules. The pectic bodies in the apple cells, which at least in part cause the gelatinizing of concentrated aqueous extract of the apple, retain enough of their former mucilaginous state to cause the particles of the powder when compressed to adhere, and the sugar further aids as an adhering agent. The product of one 125-size apple, when powdered, may be compressed into the form of a small tablet, the size depending upon the amount of pressure used. The third form is that of a small cake, compressed only enough to give it shape and stability. This form can be made about the size of the small chocolate bar. Dipped in a sirup to give a candy coating, or coated with powdered sugar, and wrapped in tinfoil, a very desirable product for confectionery trade is obtained.

## APPLE FLAKES AS A COMMERCIAL PRODUCT

The new product meets the requirements of a successful dried apple product in the following ways:

1. *Control of Moisture Content.*—The low moisture content appears to insure long keeping of the product. By sealing the paraffined cartons, even a slow change in moisture content is prevented; thus we have a product of high keeping quality sufficient to stand the adverse conditions which a successful war food must meet.

2. *Cell Structure.*—The physical structure of the tissues on being dried permits the product to absorb water readily up to the original content, and so regain approximately its original form.

3. *Coloring.*—The coloring, or browning, is controlled without bleaching the tissues or inducing marked chemical changes.

4. *Flavor.*—The flavor, the sugar, the acid, and probably the original food constituents are not appreciably affected by the processes used in this method of drying.

5. *Use of Sugar.*—By the use of sugar there is an addition of food value to the product. A concentration as low as 5 percent will give satisfactory results as far as the structure, flavor, and keeping quality are concerned. Higher concentrations may, however, be desirable from the standpoint of attractiveness and food value.

6. *Economical Production.*—The expense of production should be less than that of the production of the present form of sulfurdried apple. The expense of sulfuring, slicing, and coring are eliminated, with only the addition of sugaring and the time required to run the entire apple thru the peeler, which is negligible as compared with the time eliminated in the slicing, coring, and sulfuring. The addition of the sugar can be accomplished mechanically as the prepared tissue is being mechanically transferred to the drier room.

7. *Transportation.*—In its highly concentrated form the expense of transporting this product is reduced to the minimum. To put 1,000 bushels of fresh apples, or approximately 50,000 pounds, into the trenches in Europe, would require the handling of only about 5,500 pounds of the dried product; that is, twenty-five tons of fresh apples would make approximately two and three-quarters tons of dried product.

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With an abundant supply of storage apples in the United States, with only slight changes necessary in the present facilities for the drying of apples in commercial driers, and with the urgent necessity for fruit in the trenches, this product can be transported to Europe in large quantities, as food for the soldiers, within a short period, if properly handled.

UNIVERSITY OF ILLINOIS  
Agricultural Experiment Station

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URBANA, ILLINOIS, MARCH, 1918

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CIRCULAR No. 214

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SHALL WE PLANT MORE SPRING WHEAT?

BY W. L. BURLISON<sup>1</sup>

**A Real Need for Spring Wheat.**—Last summer when the United Department of Agriculture launched a campaign for more wheat, Illinois was asked to increase the acreage planted to this crop by 24 percent. The campaign was begun after many farmers had planned their cropping systems for 1918. It was not possible, therefore, to increase the acreage of winter wheat sufficiently to meet this demand. The only way in which the state can now attempt to do what is expected of it is to increase the acreage of spring wheat. It may not be possible to increase the Illinois wheat crop 24 percent, but it will be possible to add considerable in this direction. There is a great shortage of wheat in the country and every acre which can be put into spring wheat with a possibility of success should be seeded to this crop.

**Where to Grow Spring Wheat.**—Spring wheat does best in cool climates. Northern Illinois can afford to seed a larger acreage of spring wheat than it has put in heretofore. Counties north of a line connecting the southern boundaries of Kankakee and Mercer counties are within the spring wheat zone. Counties south of this line and north of a line drawn between the southern boundaries of Champaign and Adams counties are generally considered as out of the zone of spring wheat production, but even in these counties there is likely to be a large acreage of spring wheat planted this year. (This statement is made on the basis of numerous inquiries which are coming from patriotic people of these counties.) In localities in the southern part of central Illinois some spring wheat may also be planted. **In**

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<sup>1</sup>Associate Chief in Crop Production.

**northern Illinois a large acreage of spring wheat should be planted.** In central Illinois it is suggested that from five to ten acres be planted on each farm; this acreage to be taken from the land which is normally planted to oats.

**Varieties Best to Use.**—For some time the University of Illinois has conducted variety tests of spring wheat in DeKalb county, in northern Illinois, and in Champaign county, in central Illinois, and in both regions the Marquis wheat has given results which indicate that it is one of the best, if not the best, variety. As an average of results for the last three years, the Marquis produced 32.2 bushels per acre at DeKalb and 24.2 bushels at Urbana. Durum, Red Fife, and Blue Stem have also given fairly good yields—more than 20 bushels per acre as a three-year average.

**Soil and Soil Preparation.**—Spring wheat should be seeded on rich land. It is highly desirable that land for spring wheat be treated with manure and phosphate; but clover plowed under may take the place of manure. Good corn ground is likely to produce good spring wheat. Fall-plowed land is desirable always, but in many instances growers have disked stalk land thoroly and seeded to spring wheat and have obtained good yields. Plowing, however, is more desirable if this can be done without delaying seeding too long.

**Time and Rate of Seeding.**—Spring wheat should be seeded in central Illinois during the month of March; or just as soon as the land can be well worked and the crop planted. As a rule, one and one-half bushels per acre will be found most satisfactory. It is best to seed spring wheat before seeding barley or oats.

As a rule, spring wheat is harvested at about the same time that early oats are harvested or just before late oats are cut.

**Market Value.**—At the present time there is no difference in the price of winter and spring wheat, based upon government schedule.

**Note**—The Experiment Station does not have seed of spring wheat for sale.

GROWING PLANTS FOR WAR GARDENS

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Supply of this Bulletin exhausted



UNIVERSITY OF ILLINOIS  
Agricultural Experiment Station

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URBANA, ILLINOIS, APRIL, 1918

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CIRCULAR No. 219

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CONSERVING SUGAR IN ICE CREAM  
MANUFACTURE

H. A. RUEHE<sup>1</sup>

Since the Food Administration has limited the ice cream manufacturers to 80 percent of their 1917 sugar supply, the question that is uppermost in the mind of every ice cream manufacturer is, How am I to meet the sugar situation and maintain my business?

Altho the sugar contributes to the food value of the ice cream, its prime function is to properly sweeten the product to make it palatable. The food value can be replaced by other food products less precious than sugar.

There are several substances that have been used in ice cream in order to conserve sugar. Some of these substances are glucose, corn sugar, and commercial invert sugar. The glucose and corn sugar are considered sugar substitutes by the Food Administration but the invert sugar is not so considered because it is manufactured from the same sources as sugar. Sugar, however, can be saved by the use of invert sugar because inversion increases the total sweetness.

Sugar when taken into the body is acted upon by the invertase in the intestines and changed from sucrose to dextrose and levulose in equal proportions. Dextrose is not so sweet as sugar, but levulose is sweeter. In addition, levulose possesses a pronounced flavor which is quite characteristic of honey and which makes it taste sweeter than sugar. Accordingly, if sugar is inverted before being used in ice cream, its sweetening power is increased.

Cane sugar (or beet sugar) can be inverted by the simple process of heating in the presence of an acid. The chemical reaction that takes place results in the same products being formed as are formed when the sugar (sucrose) is taken into the human body, the sugar

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<sup>1</sup>Associate in Dairy Manufactures.

forming equal parts of dextrose and levulose. The following formula may be used in making invert sugar syrup of such sweetness that a pound of the syrup will replace a pound of sugar.

100 pounds of sugar  
44 pounds of water  
50 grams of powdered tartaric acid

These ingredients are mixed together and boiled for 30 to 35 minutes. If boiled longer than 35 minutes, the syrup darkens in color and a flavor develops which tends to make the syrup resemble glucose syrup, and this is somewhat undesirable. This solution boils at a temperature of about 221 degrees Fahrenheit. A steam pressure kettle can be used very satisfactorily or an open candy kettle over a steady fire may be used. If the solution is boiled too vigorously, there will be too large a loss by evaporation. Ordinarily the loss will be from 3 to 5 percent.

The above formula should make 140 pounds of syrup, and if there is considerable loss due to evaporation, the syrup can be brought up to this weight by the addition of water. The resultant invert sugar syrup is not unlike strained honey in appearance and taste. It contains about 71.4 percent of sugar and it tastes considerably sweeter than a sugar syrup of the same strength. It does not crystallize, and it mixes readily with the ingredients of the ice cream. It can be used in the same proportions as sugar, the amount necessary for ten gallons of ice cream being 6.5 to 7 pounds. It gives very satisfactory results in freezing and a pleasant flavor in the finished product.

It can be readily seen that by using the above method the sugar supply can literally be stretched, for with only 71.4 percent as much sugar as is now being used in ice cream, the same degree of sweetness can be obtained.

A further saving of sugar can be accomplished by substituting either corn sugar or glucose for part of the invert sugar syrup. Neither of these substitutes can be used to totally replace the sugar or invert sugar because of the undesirable flavors which are imparted to the ice cream when used in such amounts. However, they can be used to replace from 25 to 40 percent of the syrup, depending upon the quality of these products. Neither glucose nor corn sugar is as sweet as cane sugar, so that it is not possible to use either of them to replace cane sugar pound for pound. Glucose is about 60 percent and corn sugar is about 80 percent as sweet as cane sugar.

The United States Department of Agriculture has permitted the use of these sugar substitutes providing that the consumer is properly informed that such substitution has been made. Some of the state food departments have taken the same attitude, whereas others have not as yet given any decision on this question.

Conserving sugar at this time is not only meeting the demands of the ice cream business, but it is also a patriotic duty.



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JUNE, 1917

EXTENSION CIRCULAR No. 9

UNIVERSITY OF ILLINOIS  
COLLEGE OF AGRICULTURE

EXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS  
IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE  
W. F. HANDSCHIN, VICE-DIRECTOR

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CORN AND CORN PRODUCTS USED AS FOOD

BY

LUCILE WHEELER

URBANA, ILLINOIS



# CORN AND CORN PRODUCTS USED AS FOOD

LUCILE WHEELER, ASSOCIATE IN HOUSEHOLD SCIENCE

In every home the various mill products derived from the wheat kernels are used as food. White bread and entire wheat bread may be the only breadstuffs which are in common use in the household; Cream of Wheat, Farina, Puffed Wheat, with the oatmeals, may be the only breakfast foods. The three most important crops in extent of production at present are wheat, oats, and rice. Corn ranks fourth. This crop is easily grown wherever a long summer season prevails and, by using an early variety, it may be grown successfully in sections having a fairly short summer season. The South naturally spends its greatest energy on the cotton crop, while New England lacks the extensive level fields for corn cultivation. The raising of corn and the increases in its utilization are of particular interest to the Middle West.

Demands from abroad may be made upon the wheat crop whether it proves larger or smaller than in previous years, which will mean necessarily less for the people here at home. In such cases the breadstuffs so largely derived from wheat must be supplemented by other cereal products. Whether or not extreme emergencies arise, it seems of value to consider the uses of corn and to try to make it a more common article in the dietary. Many ways of utilizing the corn products to a much greater extent may be found, thus helping to lessen the demand for wheat and at the same time practising an economy which will decrease the food budget.

COMPOSITION OF CORN COMPARED WITH OTHER FOODS

	Water per cent	Protein per cent	Fat per cent	Carbohydrates per cent	Mineral per cent	Fuel value per pound	Cost per pound	Cost per 1000 calories
Corn, dry, whole grain. . . .	10.8	10.	4.3	73.4	1.5	1795	....	....
Corn meal, granular. . . . .	12.5	9.2	1.9	75.4	1.0	1770	\$.05	\$.028
Corn, green. . . . .	75.4	3.1	1.1	19.	.7	470	....	....
Potato, as purchased. . . . .	62.6	1.8	.1	14.7	.8	310	.06	.193
White flour. . . . .	12.8	10.8	1.1	74.8	.5	1640	.08	.048
Rice. . . . .	12.3	8.	.3	79.	.4	1630	.10	.061

From the table it is seen that :

Corn contains as much carbohydrate as flour.

Corn contains more fat than flour or potatoes.

Corn has more protein than potatoes and practically the same percent protein as flour.

Corn is higher in mineral content than either flour or potatoes.

The ash content of corn is, however, more like that of rice and wheat than like that of potatoes, having an excess of acid elements over the basic elements. Potato has more basic or alkaline forming elements than acid. For that reason when corn or rice replaces potato, it is necessary to use milk, fruits, and vegetables even more plentifully in the diet to supply the basic elements, such as calcium, magnesium, sodium, and potassium. Corn meal from the pecuniary standpoint supplies more than one and one-half times as much energy materials as flour for the same money, and six times as much as potatoes at the present prices. None of the cereal products from oats or corn or wheat supply adequate protein for maintenance and growth if used exclusively in a limited dietary. Milk, which is rich in all the proteins adequate for growth, supplies those which are essential and rounds out their "incompleteness."

## CORN MEAL

The following recipes, some used in laboratory courses in food work and some from the United States Farmers' Bulletins, are suggestive of a few of the many ways in which corn and hominy may be used as a vegetable, and corn meal, a mill product, may be used in batters and doughs. The prices on which costs were computed are those paid in Urbana-Champaign, Illinois, May 1, 1917.

The term fat is used in the recipes to indicate any shortening, butter, oleomargarine, lard, Crisco, or drippings. With corn meal mixtures, bacon drippings may be used to advantage. Chicken fat and beef drippings combined give a fat more like lard in consistency and may be used as its substitute. The amount of liquid in recipes will be affected by longer scalding of corn meal, necessitating more liquid, or by using a bread flour which has great absorptive power.

### CORN MEAL MUSH

1 cup corn meal	4 to 6 cups water
$\frac{1}{2}$ to 1 teaspoon salt	or
	4 cups or more milk

## Methods of mixing:

1. Combine dry ingredients with cold water and heat in a double boiler over boiling water. Cook thoroly at least one hour.

2. Start as above. Cook fifteen to twenty minutes, then remove to fireless cooker and cook overnight.

3. Have water boiling violently and add cornmeal slowly, stirring constantly. Bring to a boil and cook five minutes directly over fire. Remove from fire and cook in a fireless cooker overnight. When cooked in a fireless cooker use five cups of water to one cup of meal if for a cereal; if to be moulded and sliced, use four cups of water to one cup of meal. If to be cooked in a double boiler, use six cups of water.

One cup of meal when cooked for cereal equals four cups or enough to serve six to eight people, furnishes 550 calories, and costs less than two cents.

Milk may be used in place of water if desired. Serve with milk or cream.

## FRIED MUSH

Mush left from breakfast may be packed in tins, covered to prevent formation of a crust, and allowed to stand. Tins, such as baking powder cans, coffee cans, or small bread tins, may be used. Rinse them in cold water or grease before filling with cereal. When the mush has stood for twenty-four hours, it may be turned from the moulds, sliced, dipped in flour, and sautéd in drippings or fat. Serve with maple syrup, corn syrup, or caramel syrup.

## CARAMEL SYRUP

1 cup sugar

 $\frac{1}{4}$  cup water

Method 1. Boil together until syrup becomes the color of caramel. Add one-half cup boiling water and boil to desired consistency.

Method 2. Sugar may be melted in a frying pan and browned to the color of caramel. Then add one-half cup boiling water to dissolve, and boil until it becomes a syrup of the desired consistency.

## BROWN SUGAR SYRUP

 $\frac{1}{2}$  cup granulated sugar $\frac{1}{2}$  cup brown sugar $\frac{1}{2}$  cup water

Boil the ingredients three minutes. This makes one cup of syrup.

## CORN CAKE

 $\frac{3}{4}$  cup corn meal $\frac{1}{2}$  teaspoon salt $1\frac{1}{4}$  cups flour

1 cup milk

 $\frac{1}{4}$  cup sugar

1 egg

4 teaspoons baking powder

1 or 2 tablespoons fat

In using one cup sour milk instead of the sweet milk, use one-half teaspoon soda and two teaspoons baking powder.

Mix and sift dry ingredients. The sugar may be omitted if desired. Add milk and egg well beaten. Add melted butter and bake in a shallow pan in a hot oven twenty minutes.

	Number servings	Protein calories	Total calories	Cost
Recipe	8	160	1530	\$ .12

#### MOLASSES CORN CAKE

1 cup corn meal	$\frac{1}{4}$ cup molasses
$\frac{3}{4}$ cup flour	1 cup milk
$3\frac{1}{2}$ teaspoons baking powder	1 egg
1 teaspoon salt	1 tablespoon melted fat

With one cup of sour milk or one cup of buttermilk instead of the sweet milk, use one-half teaspoon soda and one and one-half teaspoons baking powder. Mix as for corn cake, adding molasses to milk.

	Number servings	Protein calories	Total calories	Cost
Recipe	8	127	1270	\$ .10

#### SPIDER CORN BREAD<sup>1</sup>

$1\frac{1}{2}$ cups corn meal	1 teaspoon salt
2 cups sour milk	2 eggs
1 teaspoon soda	2 tablespoons fat

Mix soda, salt, and corn meal. Gradually add well beaten eggs and milk. Heat frying pan with butter, turn in mixture, place on middle grate in hot oven, and cook twenty minutes.

	Number servings	Protein calories	Total calories	Cost
Recipe	8-10	150	1050	\$ .13

#### CORN MEAL MUFFINS

1 cup corn meal	$\frac{1}{2}$ teaspoon salt
1 cup flour	1 cup milk
2 tablespoons sugar	1 egg
2 tablespoons fat	3 teaspoons baking powder

Turn scalded milk on meal, let stand five minutes, and add flour sifted with dry ingredients. Add beaten egg.

	Number servings	Protein calories	Total calories	Cost
Recipe	8 large muffins	160	1470	\$ .12

<sup>1</sup>C. F. Langworthy and Caroline L. Hunt, "Corn Meal as a Food and Ways of Using It," Farmers' Bul. 565, U. S. Dept. of Agr.

## CORN MEAL GRIDDLE CAKES

2 cups flour	2 tablespoons sugar
$\frac{1}{2}$ cup corn meal	$1\frac{1}{2}$ cups boiling water
$4\frac{1}{2}$ teaspoons baking powder	$1\frac{1}{4}$ cups milk
$1\frac{1}{2}$ teaspoons salt	1 egg
	2 tablespoons melted fat

Add meal to boiling water and boil at least five minutes, stirring constantly. Turn into a bowl, add milk and flour sifted with dry ingredients. Add egg either beaten or unbeaten. Fry on a hot iron griddle slightly greased.

	Number servings	Protein calories	Total calories	Cost
Recipe	16 cakes	192	1630	\$ .125

RAISED CORN BREAD (BELGIAN RELIEF RECIPE)<sup>1</sup>

	Weights	Measures
Corn meal	6 ounces	$1\frac{1}{2}$ cups
Rye or graham flour	11 ounces	$2\frac{1}{2}$ cups
Yeast	$\frac{1}{2}$ ounce	$\frac{1}{2}$ -1 cake
Salt	$\frac{1}{3}$ ounce	1 teaspoon
Sugar	$\frac{1}{3}$ ounce	1 or 2 teaspoons
Fat	$\frac{1}{3}$ ounce	1 or 2 teaspoons
Water to make a stiff dough		

Add three tablespoons cold water to yeast and rub to a smooth paste. Put sugar, fat, and salt in a bowl and add one cup scalded milk or water to start with; use more if needed. When lukewarm, add yeast mixture and stir in flour and corn meal mixed together to make a stiff dough. Corn meal may be scalded with water or milk and then added to the dry ingredients, and the rye or graham flour added last. Let rise overnight if a small amount of yeast is used. When double in bulk, knead, shape into a loaf, let rise again until double in bulk, and bake in a hot oven.

	Number servings	Protein calories	Total calories	Cost
Recipe	1 loaf	228	1850	\$.088

YEAST MIXTURE WITH MAGIC YEAST OR YEAST FOAM<sup>2</sup>

2 cups water	2 tablespoons flour
2 cakes dry yeast	$\frac{1}{2}$ cup boiled mashed potatoes
2 tablespoons sugar	$\frac{1}{4}$ teaspoon salt

Soak yeast in one cup of water. Mix dry ingredients, add potatoes and the other cup of water. Add soaked yeast, beating mixture thoroly. Let rise over night. The yeast will be ready for use in the morning.

<sup>1</sup>Mrs. Melinda I. Manchester, Teachers College, 1915.

<sup>2</sup>Mrs. F. L. Stevens, 1917.

CORN MEAL BREAD<sup>1</sup>

1 cup lukewarm scalded milk	3 tablespoons butter or lard
2 tablespoons sugar	1 teaspoon salt
1 cup corn meal cooked in	1 cake dry yeast prepared
2 cups water	according to directions above

Mix ingredients, adding yeast mixture and flour to make a thin batter. Beat thoroly with a spoon or egg beater, finally adding the scalded corn meal which has been thoroly cooled. Add flour and knead to make a firm, elastic dough. Let rise until the mass has doubled its bulk. Shape into loaves. Let rise again until the loaves have doubled their bulk. Bake.

## CORN MEAL FOR CRUMBING

Use corn meal in place of bread crumbs for croquettes. Dip pieces of fish or chicken in corn meal mixed with one-fourth as much flour as corn meal. Fry in deep fat or sauté.

INDIAN PUDDING<sup>2</sup>

5 cups milk	$\frac{1}{2}$ cup molasses
$\frac{1}{3}$ cup Indian meal	1 teaspoon salt
	1 teaspoon ginger

Pour scalded milk slowly on meal, cook in double boiler twenty minutes, add molasses, salt, and ginger. Pour in buttered baking dish and bake two hours in slow oven. Serve with cream. Figs and dates may be added to vary the recipe.

	Number servings	Protein calories	Total calories	Cost
Recipe	6	195	1500	\$.145

BROWN BREAD<sup>2</sup>

1 cup rye flour	$\frac{3}{4}$ cup molasses
1 cup corn meal	1 teaspoon salt
1 cup graham flour	$1\frac{1}{2}$ teaspoons soda
2 cups sour milk	$\frac{1}{2}$ cup raisins (if desired)

Mix and sift dry ingredients. Add milk and molasses. Beat thoroly and pour into well greased moulds, filling them one-half full. Steam three hours, then remove covers and dry in the oven to brown the top. Bread may also be made in a double boiler.

	Number servings	Protein calories	Total calories	Cost
Recipe	4 loaves	244	2475	\$ .19

<sup>1</sup>Mrs. F. L. Stevens, 1917.

<sup>2</sup>C. F. Langworthy and Caroline L. Hunt, "Corn Meal as a Food and Ways of Using It," Farmers' Bul. 565, U. S. Dept. of Agr.



## HOMINY

## COMPOSITION OF HOMINY

Hominy	Water percent	Protein percent	Fat percent	Carbohydrates percent	Mineral percent	Fuel value per pound	Cost per pound
Fine, dry	11	9.4	.7	78.2	.3	1810	\$ .06
Coarse, dry	10.8	8.3	.5	79.4	.3	1770	.06
Boiled	79.3	2.2	.2	17.8	.5	380	.66

Hominy, like other cereal foods, requires long-continued and thorough cooking, especially when coarse.

## HOMEMADE HOMINY

The following old time recipes are included to suggest home preparedness at the present time. The tin can shortage will soon decrease our supply of canned hominy, necessitating either drying of hominy or home preparation.

HOMEMADE HOMINY OR HULLED CORN I<sup>1</sup>

Husk one dozen ears of corn and cover with cold water. Put one quart of wood ashes in a bag and add to the water; boil until the strength is out and remove bag. Add more warm water and boil until water boils down. Put corn in cold water and hull. Salt and drain off water.

HOMEMADE HOMINY OR HULLED CORN II<sup>1</sup>

Pour hot water over corn and soak overnight. In the morning put the corn in an iron kettle with warm water enough to cover. For each pint of corn put in one tablespoon baking soda. Boil until the hulls come off readily. Wash in clear water. Slip off hulls with hands or with little broom by stirring around in water. Soak hulled corn in water and wash until alkaline taste is gone. Boil or let freeze until tender. Salt as desired. Drain off water or cook it down until concentrated.

## CANNED HOMINY

Canned hominy was used in the recipes below and costs have been estimated on the following data for one can of hominy.

Weight	2 pounds, 2 ounces
Cost	12 cents
Contains	3 cups solid hominy and 2 cups liquid

<sup>1</sup>Dr. A. W. Chase, "Last Receipt Book," 1885.

## HOMINY GRIDDLE CAKES

1 cup milk  
1½ cups flour

½ cup hominy, chopped  
1 egg

Mix and sift the dry ingredients. Add slowly the milk with beaten egg, then the hominy. Fry on hot griddle.

	Number servings	Protein calories	Total calories	Cost
Recipe	4	140	880	\$ .13

## HOMINY MUFFINS

4 tablespoons fat  
4 tablespoons sugar  
1½ cups flour  
1 cup hominy

1 egg  
1 cup milk  
3 teaspoons baking powder  
½ teaspoon salt

Cream butter and sugar, add beaten egg and salt. Add alternately flour, sifted with baking powder, and milk, then hominy ground with coarse knife of meat grinder. Bake in buttered iron muffin pans for thirty-five minutes.

	Number servings	Protein calories	Total calories	Cost
Recipe	8 large muffins	160	1430	\$ .21

## REHEATED HOMINY I

2 cups hominy  
½ cup liquid

Heat the hominy and liquid together till the liquid has concentrated and the hominy is moist. Brown in a frying pan with two tablespoons melted butter. Grated cheese may be added if desired. Serve in place of potato.

## REHEATED HOMINY II

Reheat hominy with liquid, drain, and serve as a border around lamb or chicken. Tomato sauce or meat gravies may be used.

## HOMINY A LA SOUTHERN

2 cups hominy put thru meat grinder  
1 cup milk

1 egg  
½ teaspoon salt

Mix beaten egg with milk, add salt, and hominy. Bake in buttered baking dish till it becomes firm like a custard or until a knife when inserted is clean when removed. Avoid over baking which causes curdling.

	Number servings	Protein calories	Total calories	Cost
Recipe	6	80	600	\$ .12

## HOMINY SOUP I

2 cups liquid drained from hominy	1 tablespoon flour
1 tablespoon butter	1 cup milk
2 slices onion, chopped fine	½ cup chopped hominy
½ teaspoon pepper	1 teaspoon salt
	1 tablespoon chopped parsley

Melt butter and add the flour. Cook butter and flour together. Add slowly the hot milk and hominy liquid, then add hominy, onion, salt, pepper, and parsley. Cook twenty minutes in double boiler.

	Number servings	Protein calories	Total calories	Cost
Recipe	6	40	350	\$ .055

## HOMINY SOUP II

2 cups liquid drained from hominy	1 tablespoon chopped green pepper
1 cup milk	1 tablespoon butter
½ cup hominy pulp put thru sieve after cooking	1 teaspoon salt
	1 hard cooked egg, chopped fine
	Few drops onion juice

Heat liquid and milk, adding hominy pulp and seasonings. Cook twenty minutes in a double boiler. Add chopped egg just before serving.

	Number servings	Protein calories	Total calories	Cost
Recipe	6	64	400	\$ .078

## HOMINY SOUP III

2 cups liquid drained from hominy	½ cup hominy pulp put thru sieve after cooking
½ cup milk	½ cup celery pulp put thru sieve after cooking
1 tablespoon butter	Speck of pepper
1 teaspoon salt	1 tablespoon chopped parsley

Heat liquid and milk with hominy and celery pulp. Add seasoning and cook one-half hour.

	Number servings	Protein calories	Total calories	Cost
Recipe	6	22	300	\$ .14

HOMINY CROQUETTES I<sup>1</sup>

2 cups hominy	2 teaspoons sugar
½ teaspoon salt or less	Speck of pepper
	½ cup thick white sauce

<sup>1</sup>Tests for fat:

1. Fat should be smoking hot and should brown a cube of bread golden brown in forty seconds.

2. Temperature 190° C. or 370° F.

Put hominy thru a meat grinder using a coarse knife. Mix hominy with thick white sauce (see below) and other ingredients; use salt or sugar, depending on whether or not a sweet croquette is desired. Chill mixture and shape into balls. Roll in fine bread or cracker crumbs, then in egg, then crumbs again, and fry in deep fat till brown. May be served with jelly.

	Number servings	Protein calories	Total calories	Cost
Recipe	6 croquettes	50	600	\$ .097

#### HOMINY CROQUETTES II<sup>1</sup>

2 cups hominy	$\frac{1}{2}$ cup thick white sauce
$\frac{1}{3}$ cup grated cheese	$\frac{1}{2}$ teaspoon salt
Pepper, paprika	

Mix hominy, which has been put through a meat grinder, with white sauce, cheese, and seasoning to such a consistency that it can be moulded or shaped. Chill, shape into croquettes, roll in fine bread or cracker crumbs, then in egg, then crumbs again, and fry in deep fat till brown.

	Number servings	Protein calories	Total calories	Cost
Recipe	6 croquettes	80	600	\$ .115

#### HOMINY CROQUETTES III<sup>1</sup>

2 cups chopped hominy	1 egg, slightly beaten
2 tablespoons melted butter	Few drops onion juice
Speck of cayenne pepper	1 tablespoon minced parsley

Mix all the ingredients together, shape mixture into balls or cylinders. Roll in sifted bread crumbs, then in egg, then in crumbs again. Fry in deep fat until brown. Serve with tomato or cheese sauce.

In coating croquettes, add one tablespoon water to egg and beat slightly.

#### WHITE SAUCE FOR CROQUETTE MIXTURES

4 tablespoons flour	2 tablespoons butter
$\frac{1}{4}$ teaspoon salt	1 cup milk
Pepper	

Melt butter, add flour and salt; cook together, then add hot milk slowly. Cook till thick, cool, and use for binding croquettes.

<sup>1</sup>See note on preceding page.

## TOMATO SAUCE TO SERVE WITH CROQUETTES

2 tablespoons flour	1 cup tomato juice
$\frac{1}{4}$ teaspoon salt	2 tablespoons butter
Paprika	

Combine as above.

## CHEESE SAUCE TO SERVE WITH CROQUETTES

$1\frac{1}{2}$ tablespoons flour	1 tablespoon butter
$\frac{1}{4}$ teaspoon salt	Paprika
$\frac{1}{4}$ cup grated cheese	1 cup milk
1 egg yolk	

Combine as above. Add cheese after milk is added. Slightly beaten yolk is added just as the sauce is removed.

## HOMINY AND OYSTERS

$1\frac{1}{2}$ cups chopped hominy	2 dozen or more oysters and liquor
1 tablespoon butter	
$\frac{1}{4}$ cup bread crumbs	$\frac{1}{2}$ cup milk
Pepper	$\frac{1}{2}$ teaspoon salt

Butter a baking dish and put in a layer of hominy, then a layer of oysters, adding seasoning to each. Alternate until all materials are used. Pour milk and oyster liquor over oysters and put buttered bread crumbs on top. Bake in oven till browned on top or for about thirty to forty-five minutes, depending on the shape of the dish.

## SAUSAGE AND HOMINY ROLLS

2 cups chopped hominy	1 egg, beaten
$\frac{1}{2}$ teaspoon salt	Pepper

Shape the above mixture like sausages and roll in crumbs. Place them in a roasting or iron frying pan, alternating with six link sausages. While baking, turn once or twice in sausage fat.

Bananas cut once crosswise may also be cooked in the pan. This makes an easy dinner or lunch.

## CASSEROLE OF MEAT AND HOMINY

Drain one cup hominy, chop and put it into a buttered casserole in layers, alternating with one-half cup of meat cut in cubes. Chicken, veal, or beef may be used. Add seasonings, salt, pepper, chopped parsley, and onion salt. Add one cup meat stock or hominy liquid. Cover with buttered bread crumbs and cook covered one hour. One-third of a cup of bread crumbs in one tablespoon melted butter is required.

	Number servings	Protein calories	Total calories	Cost
Recipe	2-3	50	328.6	\$ .067

## HOMINY PUDDING

2 cups hominy, chopped fine	½ cup milk
½ cup chopped dates or raisins	1 egg, beaten
¼ cup sugar	¼ teaspoon salt

Mix the above ingredients and put in buttered custard cups. Put in a pan containing water and bake in a moderate oven till set like a custard or until a knife when inserted will be clean when removed.

	Number servings	Protein calories	Total calories	Cost
Recipe	6	80	1035	\$ .168

Serve with the following soft custard sauce:

1½ cups milk	2 eggs
¼ cup sugar	Speck salt

Beat eggs slightly, add milk, sugar, and salt, and cook in a double boiler till the custard coats a wooden spoon.

	Number servings	Protein calories	Total calories	Cost
Recipe	..	96	611.3	\$ .078

## GREEN CORN

As "all that glitters is not gold," all that is called corn is not corn for table use. Corn fed to cattle and corn raised for the corn products trade is not the typical sweet corn which is best for cooking. In the home vegetable garden, plant a good quality of sweet corn for table use and canning.

The following varieties and times of planting for Central Illinois are taken from "Home Vegetable Gardening" by Mr. C. E. Durst:<sup>1</sup>

Date	Planting	Variety Sweet Corn
May 1	1	Golden Bantam
		White Cob Cory
		Howling Mob
		Stowell's Evergreen
June 1	2	Stowell's Evergreen
June 15	3	Stowell's Evergreen
July 1	4	Stowell's Evergreen

The first planting of four varieties insures corn as early as is possible, and with the later plantings of "Evergreen" insures a continuous succession until about the time of frost. Corn to be best for the table should be pulled when of the right size and sweet in flavor, not when it has become too mature and the sugar has been converted into starch. Stowell's Evergreen and Golden Bantam are particularly recommended for canning and drying.

In selecting corn for table use and particularly for canning or drying, be sure to select only perfect ears. Corn may be infected with a fungus growth, smut, or may harbor the familiar tobacco worm. All ears which show any infection by smut should be discarded; even when not visible this disease sometimes gives the corn a bitter, unpleasant flavor and makes it unfit for canning. The tobacco worm does not necessitate rejecting the entire ear. Be sure to remove all parts which show traces of being eaten. This pest is so common that if corn partly spoiled by it were not used, it would often mean wasting almost an entire crop.

## BOILED GREEN CORN

Remove husks and silky threads. Cook ten to fifteen minutes in boiling water. Place on platter covered with napkin and cover by folding corners over the corn or with another napkin.

<sup>1</sup>C. E. Durst, "Home Vegetable Gardening," Circular 198, Agr'l. Exper. Sta., University of Illinois.

## SUCCOTASH

Cut raw corn from cob. If the corn is rather old, score each row of kernels thru the center before cutting off. Add an equal quantity of boiled shelled beans, either kidney or lima beans, and cook twenty minutes. Season with butter, salt, and milk or cream. Boiled corn may be cut from the cob and combined with beans.

## CORN OYSTERS

1 cup chopped corn or pulp	1 egg
$\frac{1}{4}$ cup flour	$\frac{1}{2}$ teaspoon salt
	$\frac{1}{8}$ teaspoon pepper

Grate raw corn from cob or put thru meat grinder. Canned corn or Kornlet may be used. To the corn pulp, add egg, flour, and seasonings. Drop by spoonfuls and fry in deep fat.

	Number servings	Protein calories	Total calories	Cost
Recipe	6	54	301	...

## CORN FRITTERS

2 cups corn	1 teaspoon salt
1 cup flour	$\frac{1}{4}$ teaspoon paprika
1 teaspoon baking powder	2 eggs

Chop corn or put it thru meat grinder. Add dry ingredients mixed and sifted. Add beaten eggs. Fry in hot fat.

	Number servings	Protein calories	Total calories	Cost
Recipe	8	134	800	...

## CORN A LA SOUTHERN

2 cups corn	2 eggs
1 teaspoon salt	$\frac{1}{8}$ teaspoon pepper
$1\frac{1}{2}$ tablespoons butter	$1\frac{1}{2}$ cups milk

Use green corn which has been boiled and cut from the cob, or canned corn. Add beaten eggs to chopped corn, add seasonings, melted butter, and milk. Pour into a greased baking dish and bake in a slow oven. Test as for baked custard by cutting with a pointed knife. If it comes out clean, the custard is done. The mixture separates if over cooked.

	Number servings	Protein calories	Total calories	Cost
Recipe	10	200	1500	...



## CORN SOUP

1 pint canned corn	1 pint milk
1½ teaspoons salt	½ teaspoon pepper
2 tablespoons butter	2 tablespoons flour
2 cups water	

Run corn thru food chopper. Add water and let boil for five minutes. Melt butter, add flour, stir together and add milk and seasonings. Cook until smooth and add corn. Bring to the boiling point and serve.

## CORN CHOWDER

2 cups corn	2 cups potatoes cut in one-
1½ inch cube fat salt pork,	fourth inch pieces
cut fine	4 cups scalded milk
2 tablespoons butter	2 cups boiling water
8 crackers	Salt
1 sliced onion	Pepper

Fry out salt pork, add onion, and cook five minutes. Stir so as not to burn. Parboil potatoes five minutes in boiling water. Add to fat and cook until potatoes are soft. Add corn and milk and bring to boiling point. Add seasoning, butter, and crackers. Serve very hot.

## CORN RELISH

5 pints sweet corn cut from cob	5 pints finely chopped cab-
	bage
5 seeded and chopped pep-	1½ pounds sugar
pers	¼ pound mustard
4 pints of vinegar	2 tablespoons salt

Mix all together and cook in a granite pan until tender. Seal in sterilized jars.

## PICKLED CORN

Drop the silked roasting ears into boiling water. As soon as the milk is set, take from the water and cut from the cob. Pack the cut corn into a container in the proportion of nine parts of corn and one of salt. Pound down with wooden potato masher. Cover with a clean cloth and a plate, weighting down the plate. If brine does not form to cover the plate in a week, add brine made of nine parts of water and one part of salt, sufficient to stand two or three inches above the plate. Take out the amount desired for use and wash in cold water. Cover with twice the amount of cold water and bring to a boil; pour off water and repeat process. Drain through a colander and return to the fire to sizzle dry. It is now ready to serve in any way.

## DRIED CORN

Blanch corn on the cob ten to fifteen minutes in boiling water. Score each row of kernels thru the center with a sharp knife, and cut

from the cob. Scrape off any pulp remaining. Spread thinly over pans or baking sheet and put in slightly warm, not hot, oven. Leave door ajar. Stir or shake pan occasionally. Corn may be dried very slowly till process is entirely complete, or it may be dried on successive days for short periods. This is done easily by using the oven heat when fire is allowed to die out after dinner is prepared, or it may be dried by placing the trays in the sun. Little or much corn may be dried at a time. The trays should be covered with screening to protect from insects. If extra corn on the cob has been cooked for dinner, the remaining ears may be used for drying.

#### RECIPE FOR CANNING SWEET CORN ON THE COB<sup>1</sup>

Can corn the same day as picked. Remove husks and silks, and grade for size. Blanch on the cob in boiling water ten to fifteen minutes. Plunge quickly into cold water. Pack ears, alternating butts and tips, in half gallon glass jars or gallon tin cans. Pour boiling water over them and add two level teaspoonsful of salt to each gallon. Place rubbers and tops in position. Seal partially but not tightly. Cap and tip tin cans. Sterilize, using one of the following methods: in hot-water bath outfit 180 minutes, one period; 90 minutes in water seal outfit; 60 minutes in steam pressure outfit under five pounds of steam; 35 minutes in aluminum pressure cooker under twenty pounds of steam. Remove jars; tighten covers. Cool and test joints. Wrap glass jars with paper, and store.

Note:—When sweet corn is taken from the jar or tin can for table use, remove ears as soon as jar or can is opened. Heat corn, slightly buttered, in steam. Do not allow ears to stand in water or to be boiled in water the second time.

#### RECIPE FOR CANNING SWEET CORN CUT FROM COB<sup>1</sup>

Can corn the same day as picked. Remove husks and silks. Blanch on the cob in boiling water ten to fifteen minutes. Plunge quickly into cold water. Cut the corn from the cob with a thin, sharp-bladed knife. Pack in jar tightly until filled to the neck of the jar. Add one level teaspoonful of salt to each quart and sufficient hot water to fill jars. Place rubber and top in position; seal partially, but not tightly. Sterilize, using one of the following methods: 180 minutes in hot-water bath outfit; 90 minutes in water-seal outfit; 60 minutes in steam pressure outfit under five pounds of steam; 35 minutes in aluminum pressure cooker under twenty pounds of steam. Remove jars; tighten covers. Cool, and test joints. Wrap with paper, and store.

<sup>1</sup>Form N R-24, States Relations Service, U. S. Dept. of Agr.

### MARKET PRICES OF MATERIALS USED IN RECIPES

The following market prices are those paid in May, 1917, in Urbana-Champaign, Illinois. In some recipes, as in those for corn used as a vegetable, the cost of the dish was not computed as it varied decidedly and gave misleading conclusions as to its expensiveness, depending on whether a commercial canned corn or a home product was used. In some recipes where prices vary particularly due to seasons, as with oysters, or in recipes where the ingredients would vary depending on personal preference, cost was not estimated.

Material	Amount	Price
Baking Powder		
Royal	1 pound	\$ .50
Calumet or Rumford	1 pound	.25
Beef round	1 pound	.24
Butter	1 pound	.45
Oleomargarine	1 pound	.30
Lard	1 pound	.30
Crisco	1½ pounds	.50
Celery	1 bunch	.10
Cheese	1 pound	.30
Corn meal	7 pounds	.35
Eggs	1 dozen	.35
Flour, bread	49 pounds	3.25
Flour, graham	8 pounds	.65
Hominy	1 can	.12
Milk	1 quart	.10
Molasses	2 pounds 6 ounces	.25
Onions	1 pound	.15
Oysters	1 quart	.40
Peppers	3	.10
Raisins	1 box	.15
Sausage	1 pound	.20
Sugar	25 pounds	2.75
Yeast, dry	5 cakes	.05
Yeast, compressed	1 cake	.02



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AUGUST, 1917

EXTENSION CIRCULAR No. 13

UNIVERSITY OF ILLINOIS  
COLLEGE OF AGRICULTURE

EXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS  
IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE  
W. F. HANDSCHIN, VICE-DIRECTOR

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WAR BREAD RECIPES

URBANA, ILLINOIS

## WAR BREAD RECIPES<sup>1</sup>

The following compilation of recipes for war breads has been prepared in the hope that it may be helpful in lessening the use of wheat.

### BREAD

Bread is made from flour of wheat or other cereals by the addition of water, salt, and a ferment. Wheat flour is best adapted for bread making, as it contains gluten in the right proportion to make a spongy loaf. Gluten, the protein of the wheat, is a gray, tough, elastic substance, insoluble in water. Gluten, being elastic, is expanded by the gas developed in bread dough by fermentation, thereby causing the bread to rise. Flour should always be sifted before measuring.

Yeast is a microscopic plant of fungus growth, and is one of the lowest forms of vegetable life. The yeast plant reproduces by a process known as budding, multiplying very rapidly. Like other plants, favorable conditions for its growth are (1) food, (sugar); (2) warmth, (25° to 35° C. or 70° to 90° F.); (3) moisture. Fermentation, the production of alcohol and carbon dioxide, is the result of the growth of the yeast plant. The yeast plant is killed at a temperature of 100° C. or 212° F. Liquid, dry, or compressed yeast may be used for raising bread. Good bread depends primarily upon good yeast. Fermented bread is made by mixing flour to a dough with water or milk, salt, and a ferment. The dough should be thoroly kneaded to mix the ingredients and should be allowed to rise in a favorable temperature until it has doubled its bulk. It is then ready to be shaped into loaves. When it has doubled its bulk again, it is ready to be baked.

Bread is baked (1) to kill the ferment, (2) to render the starch digestible by cooking, (3) to drive off alcohol and carbon dioxide, (4) to develop flavor. The loaf should continue rising for the first fifteen minutes while baking, and continue browning for the next twenty minutes. The heat may then be reduced and the baking finished in fifteen minutes.

Rolls require more heat than bread. They should continue rising for the first five minutes and begin to brown in eight minutes.

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<sup>1</sup>Used by Mrs. F. L. Stevens at the University of Illinois School for Housekeepers.

## YEAST

Yeast Foam is used in this demonstration. For yeast mixture when Magic Yeast or Yeast Foam is used:

2 cups water	2 tablespoons flour
1 cake dry yeast	$\frac{1}{2}$ cup boiled mashed pota- toes
2 tablespoons sugar	$\frac{1}{4}$ teaspoon salt

Soak yeast in one cup of water. Mix dry ingredients, add potatoes and the other cup of water. Add soaked yeast, beating it thoroly. Let rise over night. The yeast will be ready for use in the morning.

## WHEAT BREAD

3 tablespoons lard	1 cup lukewarm (scalded) milk
2 tablespoons sugar	1 teaspoon salt
1 cake dry yeast prepared according to directions	

Mix ingredients, adding yeast mixture last. Beat together thoroly and add flour, beating with spoon or egg beater. Add flour and knead until a firm, elastic dough is obtained. Let rise until the mass has doubled its bulk. Shape into loaves. Let rise again until the loaves have doubled their bulk. Bake according to preceding directions.

## PARKER HOUSE ROLLS

For Parker House Rolls add an unbeaten egg, two tablespoons sugar, and two tablespoons butter at first mixing. Let the mass rise until it has doubled its bulk. Roll out on floured board, mould into shape, and let rise again until slightly increased in bulk. Spread melted butter over half of each bread roll, fold over, pressing the edges together. Place on buttered pan, one inch apart, and let rise. Bake from twelve to fifteen minutes in hot oven.

## SALAD OR DINNER ROLLS

Use the same ingredients as for Parker House Rolls, adding four tablespoons of butter to the first mass of dough. Shape as for Parker House Rolls, crescents, bow knots, clover leaf, braids, twists, sticks or other fancy shapes.

## SWEDISH ROLLS

Use the recipe for Salad Rolls, roll to one-fourth inch in thickness, let rise fifteen minutes, spread with butter, sprinkle with two tablespoons sugar mixed with one-third teaspoon cinnamon, one-third cup chopped, stoned raisins, and two tablespoons chopped

citron; roll like a jelly roll and cut into three-fourths inch pieces. Again let rise. When taken from oven, brush over with white of egg slightly diluted with water; return to oven to perfect the glaze.

#### BREAD, USING ONE-THIRD STALE BREAD CRUMBS

Use proportions as for Wheat Bread recipe given above, working into the batter one cup of stale bread crumbs. The absorbent quality of the crumbs permits the use of less flour than in other dough mixtures.

#### BREAD, USING ONE-THIRD CORN MEAL

1 cup boiling water	2½ cups corn meal
½ cup lukewarm scalded milk	2 tablespoons sugar
2 tablespoons lard	1 teaspoon salt
	1 cake dry yeast prepared according to directions

Add the boiling water to the corn meal, cook in a double boiler for a few minutes, and proceed in the manner given in directions for bread.

Three cups of liquid of the recipe requires about seven cups of flour, varying slightly according to the quality of the flour and meal.

#### OLD VIRGINIA BATTER BREAD

1 pint corn meal	1 quart scalded milk
1 teaspoon salt	1 teaspoon sugar (may be omitted)
1 egg	

Stir the corn meal into the quart of scalded milk; stir and cook to a mush. Allow to cool a little and add salt, sugar, and the milk, beaten yolk of egg, and lastly fold in the white of egg, beaten stiff. Melt two tablespoons of shortening in a baking pan, pour in mixture, and bake for forty-five minutes.

#### SOUTHERN SPOON BREAD

½ cupful sifted corn meal	1 tablespoon butter
½ cupful sweet milk	1 cupful boiling water
½ teaspoon salt	1 egg
	1 teaspoon baking powder

Pour the boiling water over the meal, and stir until smooth. Let cook briskly for five minutes; add butter and salt, stirring as it cooks. Take from fire. Add milk and the egg well beaten and then the baking powder. Pour it into a well buttered, shallow baking dish and bake for twenty minutes in a moderate oven, letting it brown carefully before removing. Serve from the dish in which it was baked.



## CORN MEAL AND RICE WAFFLES

$\frac{1}{2}$ cup corn meal	$\frac{1}{2}$ cup flour
$\frac{1}{2}$ teaspoon soda	1 tablespoon melted butter
1 cup boiled rice	2 eggs, well beaten
1 teaspoon salt	1 cup sour milk

Sift together the flour, soda, and salt; add the other ingredients and beat thoroly; have irons hot and well greased.

## GEM CRACKERS

Sift one and one-half pints of flour, one-half pint corn meal, one teaspoon baking powder, and the same amount of salt. Rub in two tablespoons butter, two-thirds of a pint of milk; work into a smooth, fine dough. Place on bread board, kneading a few times and roll to quarter-inch thickness; cut with a small oval or round cutter, lay on greased baking tin, puncture the top of each cracker with a fork, brush over with milk, and bake in hot oven.

## CORN MEAL PUFFS

Into one quart of boiling milk stir eight tablespoonfuls of meal, four tablespoonfuls powdered sugar, and one teaspoonful nutmeg. Boil five minutes, stirring constantly. Remove from fire and when cool stir in six well beaten eggs. Mix well and pour the mixture into buttered cups, nearly filling them. Bake in moderate oven one-half hour. Serve with lemon sauce.

## CORN MEAL BISCUITS

1 cup yellow corn meal	2 cups peanut cream
2 teaspoons salt	

Put the meal into a shallow pan and heat in the oven until it is a delicate brown, stirring frequently. Make the nut cream by mixing peanut butter with cold water and heating. It should be the consistency of thick cream. While the nut cream is hot, stir in the corn meal, which should also be hot. Beat thoroly. The mixture should be of such consistency that it can be dropped from a spoon. Bake in small cakes on a greased pan.

If preferred, these biscuits may be made with cream or with butter in place of peanut cream, and chopped raisins may be added, one cup being the allowance for the quantities given above.

## DELICATE INDIAN PUDDING

1 pint sweet milk	4 tablespoons sugar
2 tablespoons butter	2 large tablespoonfuls corn meal
3 eggs	

Salt

Boil milk and sift meal in slowly; add butter, sugar, and salt. Set aside to cool, then add beaten eggs. Put in a baking pan and cook for three-quarters of an hour.

#### OAT MEAL BREAD.

Oat meal or rolled oats, passed thru a food chopper, may be used in the same proportion as corn meal. Cooking before adding to dough mixture as with corn meal is, however, not necessary.

#### OAT MEAL AND CORN MEAL BREAD

1½ cups rolled oats	3¾ cups flour
1¼ cups corn meal	2 cups boiling water
½ cup brown sugar	2 teaspoons salt
1 yeast cake	

Dissolve the yeast cake in the lukewarm water. Pour the boiling water over the rolled oats, salt, and sugar, and let stand until lukewarm; add the dissolved yeast, corn meal, and flour. Let rise until light. Beat well, let rise again, and put into pans. Bake when light.

This combination of oat meal, corn meal, and wheat makes a palatable and economical variation.

#### RYE BREAD

Another cereal which may well be substituted for wheat in breads is rye. When this is used about one-half wheat and one-half rye make a good combination, as all rye is likely to be too strong for American tastes.

#### “OLD GLORY BREAD”

1 cup rye	3 cups whole wheat flour
8 cups white flour	4 cups water
1 teaspoonful salt	1 yeast cake or more according to the length of time allowed for rising
3 tablespoons shortening (may be omitted)	

Add salt and shortening to boiling water. Cool to lukewarm. Add yeast cake, dissolved in a little of the cool water. Add flours sifted together and knead until smooth and soft. Let rise in warm room until double its size. Knead and divide into loaves. Let rise as before and bake one hour. This recipe makes four medium sized loaves.

“Old Glory Bread” is used much in France at present.

<sup>1</sup>University of Vermont, Agricultural Extension Service.

The following recipes for barley bread are recommended by the University of Wisconsin and were published in the Journal of Home Economics for July, 1917.

#### BARLEY BREAD I

4 cups whole wheat flour	1 cup milk
2 cups barley meal	2 tablespoonfuls molasses
1 cup water	1 teaspoonful salt
	$\frac{1}{2}$ yeast cake

Boil milk and water and cool; add molasses, salt, and yeast mixed with a little cold water; stir in flour and barley meal which have been sifted together. Knead to a soft dough, adding more flour, if necessary. Cover and let rise until the mixture is double its bulk. Knead a second time, form into loaves, place in well greased pans and let rise a second time until dough has very nearly doubled its bulk. Bake in a hot oven from one-half to one hour, depending upon size of loaves.

#### BARLEY SPOON BREAD

$\frac{1}{4}$ cup salt pork cut in $\frac{1}{4}$ inch cubes	1 cup barley meal
	4 cups boiling water
	2 or 3 eggs

Cook salt pork in saucepan until slightly brown, add water and when boiling, sprinkle in barley meal, stirring constantly. Cook in a double boiler one hour, cool, and add well beaten eggs. Turn into a buttered dish and bake in a moderate oven three-fourths of an hour.

#### BARLEY MUFFINS

1 cup whole wheat flour	1 egg
$\frac{1}{4}$ cup barley meal	$1\frac{1}{4}$ cups sour milk
$\frac{1}{4}$ teaspoonful salt	$\frac{1}{2}$ teaspoon soda
2 teaspoonfuls baking powder	2 tablespoonfuls beef drippings or lard

Sift flour, barley meal, salt, and baking powder. Dissolve soda in a little cold water and add to sour milk. Combine flour mixture and sour milk; add beaten egg and melted fat. Bake in muffin pans in a moderate oven.

#### BARLEY SCONES

1 cup whole wheat flour	2 tablespoonfuls lard or beef drippings
1 cup barley meal	
$\frac{1}{4}$ teaspoonful salt	$\frac{3}{4}$ cup sour milk
$\frac{1}{8}$ teaspoonful soda	2 teaspoonfuls baking powder

Sift flour, barley meal, salt, and baking powder together and work in lard with tips of fingers or two knives. Dissolve soda in

a little cold water and add to sour milk. Combine flour mixture and sour milk to form a soft dough. Turn out on a well floured board, knead slightly, roll to one-half inch in thickness; cut in diamond shapes and bake in a hot oven.

#### POTATO BREAD<sup>1</sup> (STRAIGHT-DOUGH METHOD)

The following recipe for potato bread has been so made as to use a large amount of potato as compared with flour. Excellent bread can be made with less potato. In making recipes it should be remembered that a pound of mashed potato contains about one and one-fourth cupfuls of water and starch and other substances about equivalent for the purpose to those in one cupful of wheat flour.

3 pounds boiled and peeled potatoes (equivalent to about 3¾ pounds water and 3 cups flour)	1½ level tablespoons salt
	3 level tablespoons sugar
	2 cakes compressed yeast
	4 tablespoons water
2¼ pounds bread flour	

Clean thoroly and boil, without paring, twelve potatoes of medium size, allowing them to become very soft. Pour off the water, peel and mash the potatoes while hot, being careful to leave no lumps. Take three pounds, or five solidly packed half-pint cupfuls of mashed potato, and when at the temperature of lukewarm water add to it the yeast, rubbed smooth with three tablespoonfuls of lukewarm water. Rinse the cup in which the yeast was mixed with another tablespoonful of water and add to the potato. Next add the salt, the sugar, and about four ounces of the flour, or one scant half pint of sifted flour. Mix thoroly with the hand, but do not add any more water at this stage. Let this mixture rise until it has become very light, which should take about two hours if the sponge is at a temperature of about 86° F. To this well-risen sponge, which will not be found to be very soft, add the remainder of the flour, kneading thoroly until a smooth and elastic dough has been formed. The dough must be very stiff, since the boiled potato contains a large amount of water, which causes the dough to soften as it ferments. Therefore, add no more water to the dough unless it is absolutely necessary. Set back to rise until it has trebled in volume, which will require another hour or two. Divide the dough into four parts, mold them separately, and place in greased pans which have been warmed slightly. Allow the loaves to rise until they have doubled in volume and bake forty-five minutes at a temperature of 400° to 425° F. This recipe makes four one-pound loaves.

<sup>1</sup>Caroline L. Hunt and Hannah L. Wessling, "Bread and Bread Making in the Home," Farmers' Bul. 807, U. S. Dept. of Agr.

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URBANA, ILLINOIS

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THE WINTER FEEDING OF IDLE FARM  
HORSES

BY J. L. EDMONDS\*

Economy in wintering idle farm horses, like many other good practices, may easily be overdone. Many hundreds of horses in the corn belt are fed and cared for each winter so poorly as to leave them entirely unfit for hard work when spring comes. In fact, the poor care given often weakens them so as to lower their resistance and cause unnecessary losses from disease during the winter or when they go into hard work in the spring.

It will be especially important in the spring of 1918 to see that every needed farm horse is in prime condition to do good service in the collar. This is necessary in order to get the largest possible return in work performed out of the man labor available, which will, without doubt, be the most important limiting factor in determining the size of the 1918 crop.

**Three Things are Necessary** in the wintering of work horses satisfactorily: sufficient exercise, proper shelter, and the right amount of well-selected feed. Naturally, in their efforts to provide these, some horse owners may use more high-priced feed or spend more on care and shelter than is needed for best results. Except in the case of growing animals and breeding stock, which require the food materials needed for growth of bone and muscle, idle horses can be satisfactorily carried thru the winter to a large extent on such coarse roughages as oat straw, corn stover, sorghum hay, and similar feeds. These feeds are commonly spoken of as carbonaceous

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\*Assistant Professor of Horse Husbandry.

roughages. They furnish mainly heat and relatively little bone and muscle-forming material.

**Stalk Fields Not Adequate.**—In some years stalk fields furnish a considerable amount of fairly satisfactory feed. It is a mistake, however, to assume that they will furnish adequate feed and shelter for an idle horse. The exercise and fresh air may be beneficial to the horses, but often the value of the feed obtained, especially late in the season, when the ground is likely to be soft, is more than offset by the damage done to the field by the tramping of the animals.

**Feed Legume Hay.**—To keep the work horse in good, healthy condition it is advisable when possible to give one feed a day of legume hay, such as clover, coarse alfalfa, sweet clover, or soybean or cowpea hay where these are grown. It is good practice to give this feed in the evening, allowing free access to the straw or other roughage during the day. If no such legume hay is supplied, at least a small amount of grain must be fed if the carbonaceous roughages mentioned are to be used to good advantage and the animals kept in good, healthy condition. Ear corn and oats are the standard grains for mature horses, oats being preferable especially for horses being carried largely on the rough carbonaceous feeds mentioned.

**Avoid Damaged Corn.**—The large crop of oats produced in 1917 makes it possible to use this grain rather largely in our horse-feeding operations. The large amount of soft corn makes it safe to assume that much of it will be moldy or otherwise damaged. Special attention should be given to avoiding such corn in feeding horses, since horses are especially susceptible to sickness and poisoning from these sources, many dying each year from this source of poisoning. If damaged corn must be fed, the danger is lessened if it can be fed mixed with oats or oats and bran.

**Little Grain Needed with Good Roughage.**—In general, the amount of grain required to keep an idle horse in good condition during the winter will depend to a great extent upon the kind and quality of roughage fed. If some good legume hay is used, little, if any, grain is needed, since such hay helps to supply all of the food materials needed and also to keep the bowels in good condition. The general condition of the horse as to flesh and general thrift must be the best guide to the feeder in selecting the ration.

**Use Bran Mash.**—One or two bran mashes a week for the horse that is being wintered largely on coarse carbonaceous feed is good, cheap health insurance. For winter feeding the mash may be made by mixing three to four pounds of dry bran with hot water and allowing it to cool to feeding temperature in a covered pail. Bran

mashes help to prevent much sickness and death due to impaction of the digestive organs, "straw colic," and similar troubles. A handful or two of oil meal a day may take the place of the bran mashes, and will help to keep the bowels properly regulated. Bran mash or oil meal fed as recommended is one of the best remedies that can be used by those in search of a good conditioner for their horses; and it is much cheaper than the condition powder and medicated stock foods often used to improve the general thrift of the horse being wintered on rough feed.

**Succulent Feeds**, such as roots and corn silage, have not been used in this country to any great extent for horse feeding. Of the root crops, carrots are considered best for horses. Altho low in food value, when compared with grains, they have a high value as conditioners. The serious objection to their extended use is the large amount of hand labor required in their production. Careful feeders have secured good results in feeding moderate amounts of good corn silage to horses that are being carried thru the winter. Such silage should be made from well-matured corn, put up in a good air-tight silo, with enough moisture to insure its being packed solid and excluding all air. If the corn is fairly dry when put into the silo, enough water should be added to insure its packing solid. Ten to fifteen pounds of good silage fed in connection with legume hay or carbonaceous roughage will usually give fairly satisfactory results. The greatest care must be exercised in feeding silage to horses, however, as any mold either in the silo or in the feed troughs is almost sure to cause trouble, and frequently death. Naturally, more risk may be taken with cheap horses than with high-class, valuable ones.

**Exercise** is necessary to good health. Probably the best place to provide this is a blue-grass pasture which has been allowed to grow up somewhat during summer and fall, where not only exercise may be had, but considerable good picking as well. Small lots and straw yards, unless used in connection with a larger area, are not satisfactory because horses do not move about enough. In some instances, stacks, yards, and protected wood lots furnish sufficient shelter. Under most conditions, however, it is more satisfactory to get up the horses in the evening and give them some feed and a dry bed in the barn.

**Other Items of Good Care.**—A few other items of good care should not be neglected. Digestive troubles are sometimes caused by bad teeth. Experience shows the importance of having the horses' teeth gone over once a year by a competent veterinarian. This applies particularly to horses with some age. Feet should be carefully leveled with a hoof rasp once a month. The edge of the wall

should be rounded somewhat to prevent its chipping or breaking off irregularly.

Good, clean drinking water should be supplied liberally. In cold weather a tank heater should be used to keep the water trough free from ice. Salt should also be provided, either thru free access or regular salting once a week or oftener.

**Every Gain in Horse Power Will Mean a Saving of Man Labor.—**

It is neither economical nor wise to starve the horse thru the winter by giving either too little feed or poorly selected feed. He cannot do full work in this condition even tho he is given enough good feed when he goes to hard work in the spring. Most farmers have sufficient time to give their idle work horses every necessary attention during the winter, and it will be of the greatest importance in the spring of 1918 to have every farm horse in prime condition to do a real horse's work.





UNIVERSITY OF ILLINOIS  
Agricultural Experiment Station

URBANA, ILLINOIS, JULY, 1918

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CIRCULAR No. 225

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SELECTION AND STORAGE OF SEED CORN

BY W. L. BURLISON AND E. A. WHITE



NO TIME IS WASTED WHEN A HOOP IS PLACED IN THE TOP OF THE SACK USED  
FOR GATHERING SEED

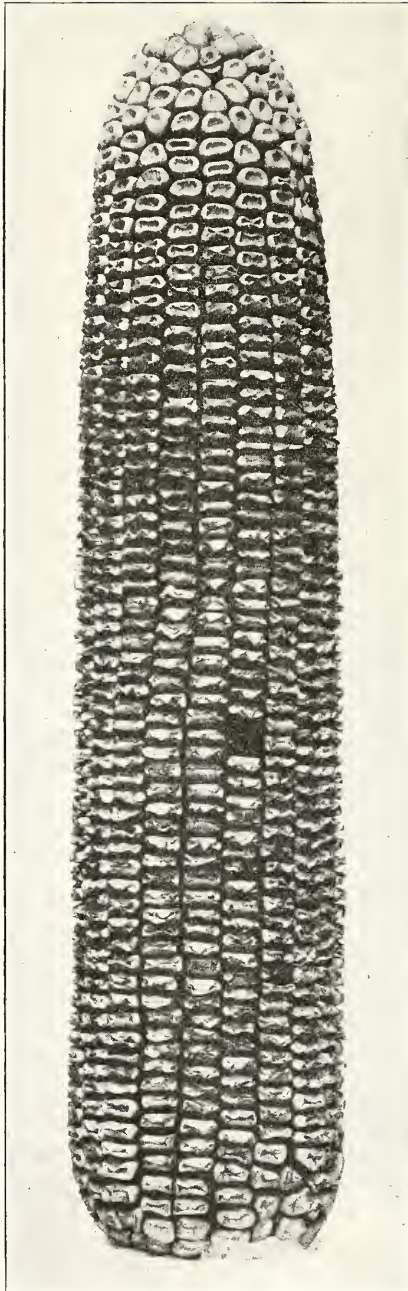


FIG. 1.—THIS IS A GOOD TYPE TO KEEP IN MIND WHEN SELECTING SEED CORN

## SELECTION AND STORAGE OF SEED CORN

BY W. L. BURLISON, ASSOCIATE CHIEF IN CROP PRODUCTION, AND  
E. A. WHITE, ASSISTANT PROFESSOR IN FARM MECHANICS

Illinois has passed thru a seed-corn crisis. The seed-corn situation for 1918 will be recorded as the most serious in the history of corn-growing America.

The northern part of Illinois produced practically no seed corn. Central Illinois saved a small amount of good seed, but not even enough for its own use. Great quantities of corn had to be moved from southern counties of the state and many nearby sections of Indiana and Missouri, in order to supply the demand created by the lack of seed corn in northern Illinois. This meant that seed grown in localities with rather long seasons had to be used in localities of shorter seasons. All this contains an element of danger, and in order to eliminate so far as possible late maturing seed for the 1919 planting, strong emphasis must be placed on the *early selection of a full supply of seed this fall*.

If the supply is to be sufficient for next year, two facts are to be kept clearly in mind:

1. Seed corn must be selected early, and from the field.
2. It must be properly stored.

### WHEN AND HOW TO SELECT SEED CORN

Select seed corn before the first killing frost. For the extreme northern part of the state, October 12 is the average date for the first killing frost; for the central-northern, October 15; for the central, October 16; for the central-southern, October 20; and for the extreme southern, October 24. However, general killing frosts sometimes occur three weeks earlier than these dates, so that seed-corn week should begin September 15 for northern Illinois, September 20 for the central district, and September 25 for the southern third of the state. *Let each community proclaim a "seed-corn week" to begin with the date mentioned for the district.*

If corn is allowed to remain in the field during cold, moist weather, the germination and vitality will be greatly diminished, if not entirely lost. The moisture content of corn is often 30 percent or more when the seed is ready to pick. If freezing weather catches the seed ears when they contain a relatively high percentage of water, the corn is likely to be of no value for seed purposes.

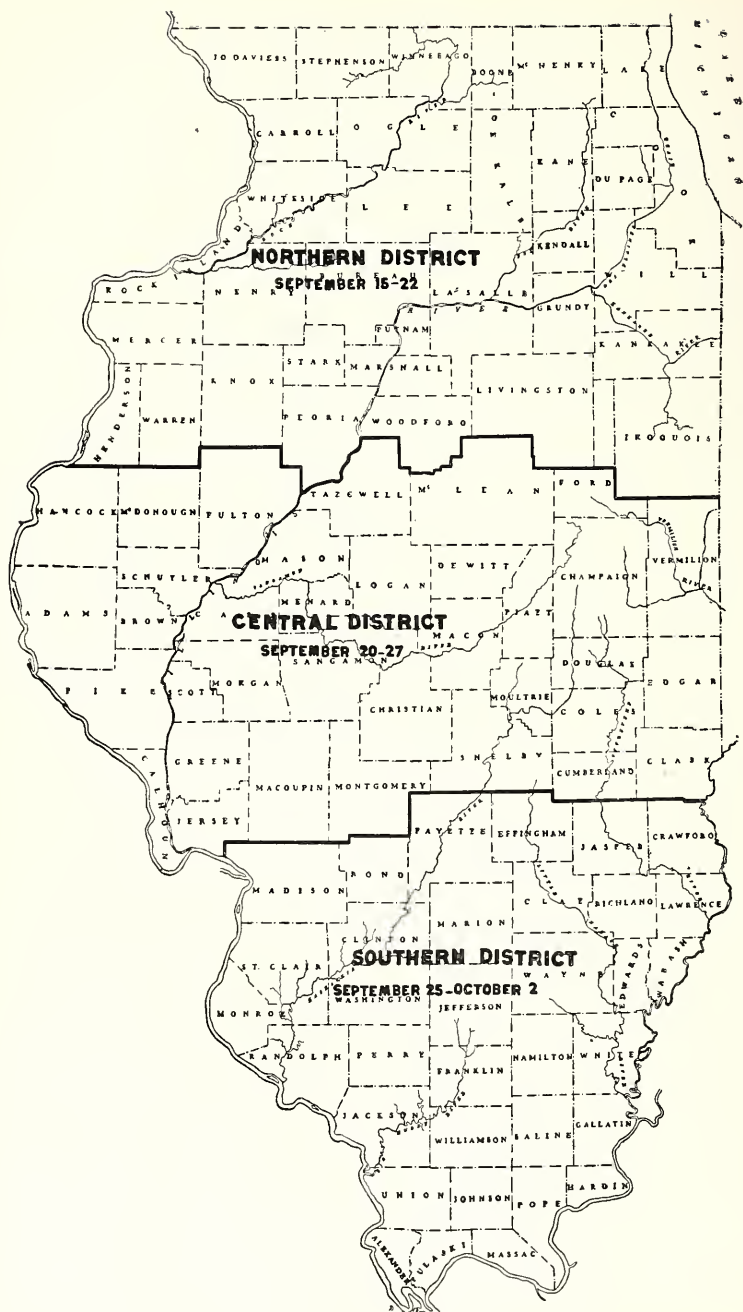


FIG. 2.—WHY NOT HAVE A SEED-CORN WEEK FOR EACH OF THESE DISTRICTS?

The following points should be observed in selecting seed corn from the field:

1. Ears of medium size only should be chosen.
2. The grains should be well dented (corn will make satisfactory seed as soon as the grains are well dented).
3. The ears should be of good shape, but early maturity must not be sacrificed for fancy points.
4. Ears should be chosen which hang down, because they shed water.
5. The shank should be of medium length and diameter.
6. There should be two good stalks in the hill from which a seed ear is taken.

Let the state have a seed-corn reserve. Select sufficient seed for two years. This will not cost much as compared to what it might mean to Illinois. It is a standard insurance against the recurrence of the near disaster of 1917-1918.



FIG. 3.—THE EAR ON THIS STALK HAS THE RIGHT ANGLE

MOISTURE CONTENT AND GERMINATION OF CORN HARVESTED AT VARIOUS DATES  
DURING FALL AND WINTER OF 1917-1918

From Nebraska Experiment Station Bulletin 163

Condition of corn at time of first frost, October 8	Moisture and germination of corn gathered on—					
	October 8 <sup>1</sup>		November 19		January 17	
	Mois- ture	Germin- ation	Mois- ture	Germin- ation	Mois- ture	Germin- ation
	<i>percent</i>	<i>percent</i>	<i>percent</i>	<i>percent</i>	<i>percent</i>	<i>percent</i>
Shocked corn:						
1. Fairly well matured, ears solid .....	30	98	17	85	14	86
Corn standing in field:						
2. Fairly well matured, ears solid .....	35	98	17	83	14	88
3. Somewhat rubbery, ears twist .....	39	94	21	56	17	61
4. Very rubbery, grain me- dium soft .....	43	92	26	34	19	20
5. Grain very soft .....	47	92	27	14	22	6
6. Late dough stage .....	50	82	34	10	27	0
7. Milk stage .....	63	44	36	1	28	0
Minimum temperature, degrees F. ....	..	24	..	17	..	-21

<sup>1</sup>The first selection was made after the first killing frost which occurred in the early morning of October 8.

It will be noticed from the accompanying table that the germination test of the corn gathered early was satisfactory in every case except when gathered in the milk stage. The moisture content, however, of corn gathered early is high, and this necessitates care in handling the seed ears. Additional data in the Nebraska bulletin from which the above figures are taken show that in nearly every case seed selected after October 8 fell in germination test.

## STORAGE OF SEED

The chief problems in storing seed corn are to provide a means whereby the moisture content can be reduced to such a point that the germ is not injured by freezing, and then to maintain this condition until planting time. The minor problems are to afford protection against the ravages of vermin, to reduce the work of storage, and to have the ears so placed that they are accessible when the germination test is made.

The two prime necessities for successful seed storage are ventilation and heat. Ventilation provides a means for removing the excess moisture. Heat prevents freezing and hastens the drying process. In many years proper ventilation is all that is required. However, some artificial means for heating should be provided in case it is needed. Kiln-dried corn possesses strong germination usually. The seed ears should be dried in a room having a temperature not above 110 degrees. Corn containing less than 14 percent of moisture is not easily injured by cold weather, but seed containing more moisture should not be exposed to freezing temperature.

The Wisconsin Experiment Station has reported some very definite facts in this connection. In tests by that station corn kept in a warm, dry room or attic, gave a germination test of 98 to 100 percent; corn well dried before freezing germinated as well; when the seed was left in the shock or in the open crib during the winter months, the germination and vitality were so low that the product was unfit for seed.

A large amount of the trouble experienced with seed corn in 1917-18 could have been prevented by heating the storage rooms, if no more than just enough to prevent freezing. The protection against vermin can generally be secured by using a form of construction which offers no harbors for mice and rats; or, if this is not sufficient, wire netting can be used to line the seed room. The presence of cats also helps to reduce this trouble.

Seed corn should never be stored in sacks, piles, or even by placing one row of ears immediately on top of another. The individual-ear method of storage is the only safe one to use, at least until the moisture content has been reduced to 18 percent or lower. This method of storage facilitates ventilation, which hastens the drying process, tends to prevent molding, and lessens the trouble caused by mice and rats.

## SYSTEMS OF STORAGE

There are several systems that have given excellent satisfaction for the individual-ear method of storage. No matter what method is used, seed corn should be stored at least one foot off the floor, and for convenience it should not be placed over seven feet above the floor.

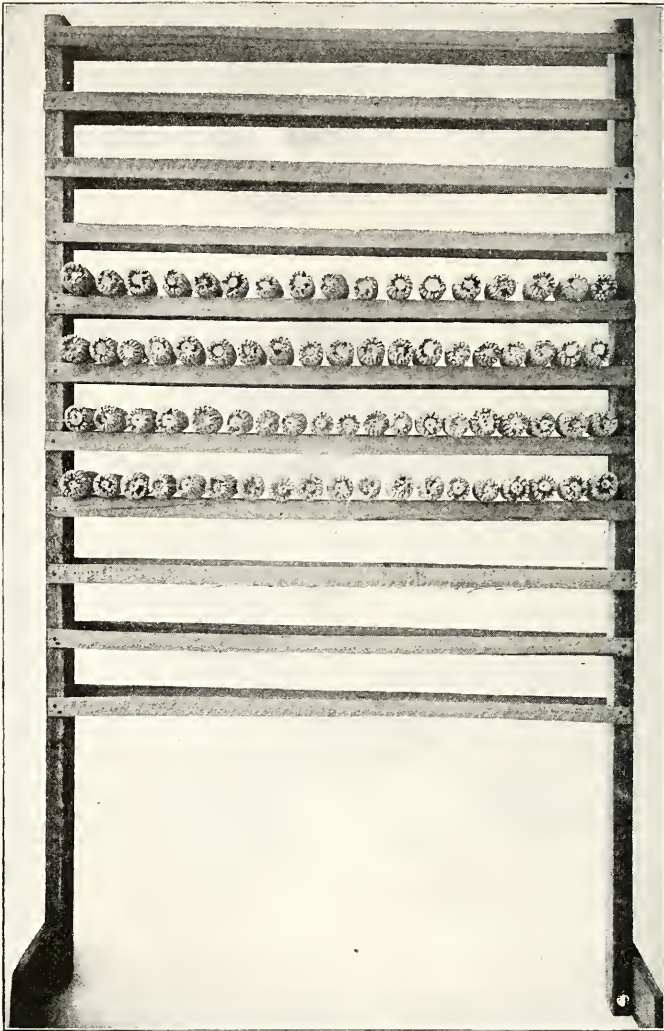


FIG. 4.—LATH RACK SYSTEM, A FAVORITE METHOD OF STORAGE  
The ears need not be removed until after the germination test.

*Lath-Rack System.*—The lath-rack system is shown in Fig. 4. By placing two sets of racks side by side and leaving an alley between the rows of racks, every seed ear will be accessible. There should be a space of at least three inches between the laths. The ends of the racks should be at least 1x6-inch lumber; the footings 2x6-inch lumber, 2 feet long. If desired, these racks may be built as part of the seed house, in which case the footings would not be required.



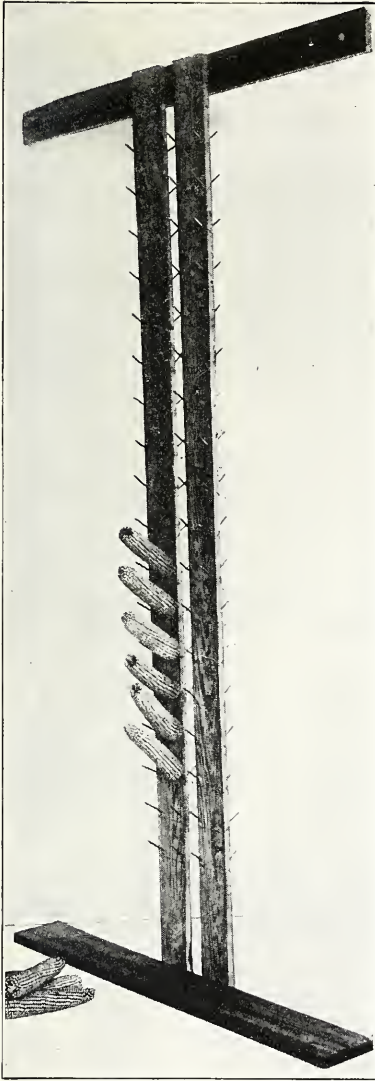


FIG. 5.—NAIL SYSTEM

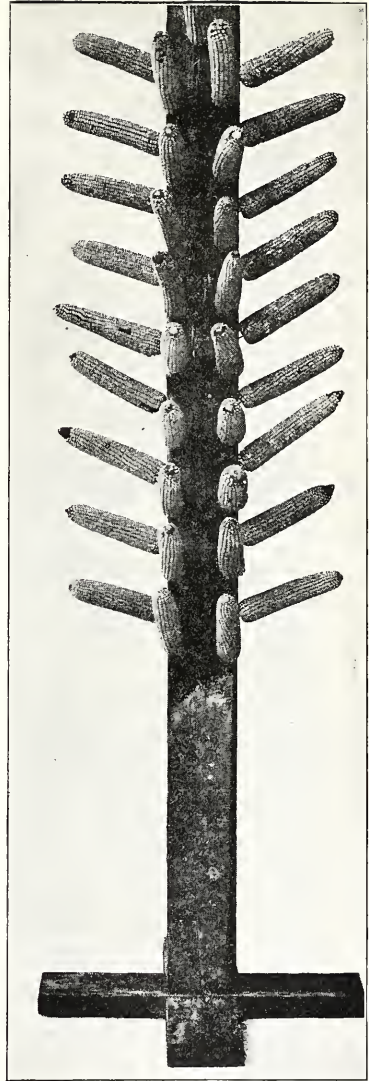


FIG. 6.—POST SYSTEM

*Nail System.*—The nail system is shown in Fig. 5. Two rows of ten-penny nails, three inches apart, are driven from each side of a 1x4-inch piece of lumber, so that they will make an angle 45 degrees from vertical. The nails are four inches apart in the vertical direction. The 1x4-inch pieces are placed six inches center to center. The rows of racks are placed four feet apart, which allows for alleys.

*Post System.*—In the post system (Fig. 6), nails from which the heads have been cut are driven into a post, with the same spacing as used in the nail system. Whenever the posts are available, this method is very satisfactory; otherwise it is not to be recommended.

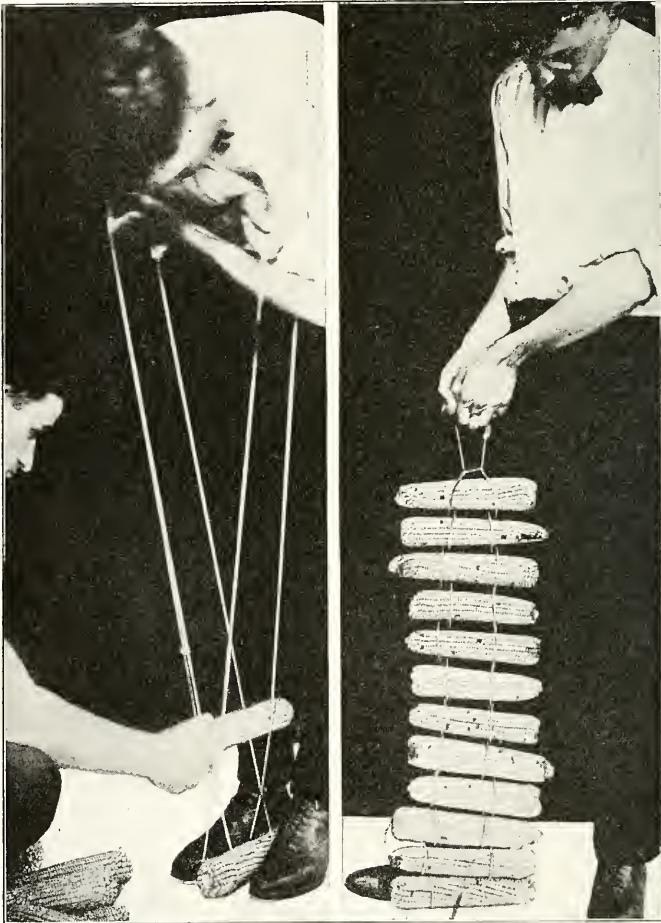


FIG. 7.—TWINE SYSTEM. ONE OF THE COMMON METHODS OF HANGING SEED EARS

By this plan large quantities of corn can be stored in a limited space. The ears are held firmly in place.

*Twine System.*—The twine system (Fig. 7) requires about one-fourth pound of bundle twine per bushel. The units can be suspended from the rafters or from especially constructed racks. When this system is used, the seed room can be filled from the back forward, leaving no aisles.

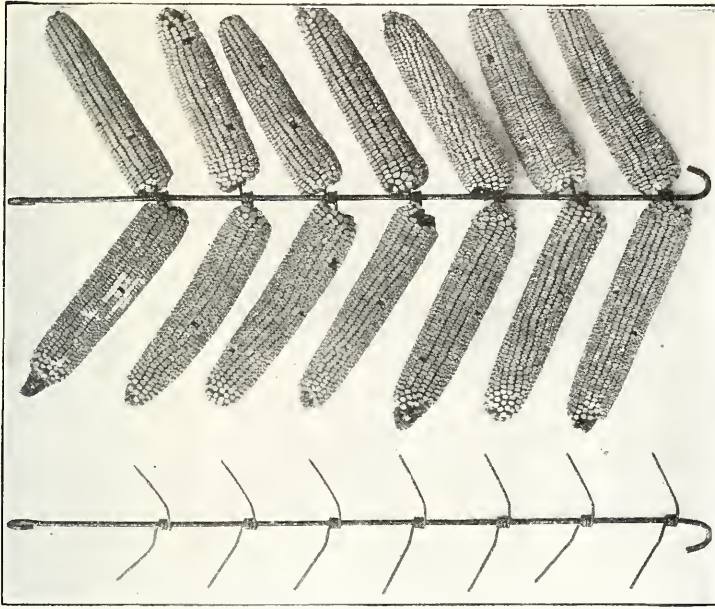


FIG. 9.—PATENT HANGERS ARE SOMETIMES USED

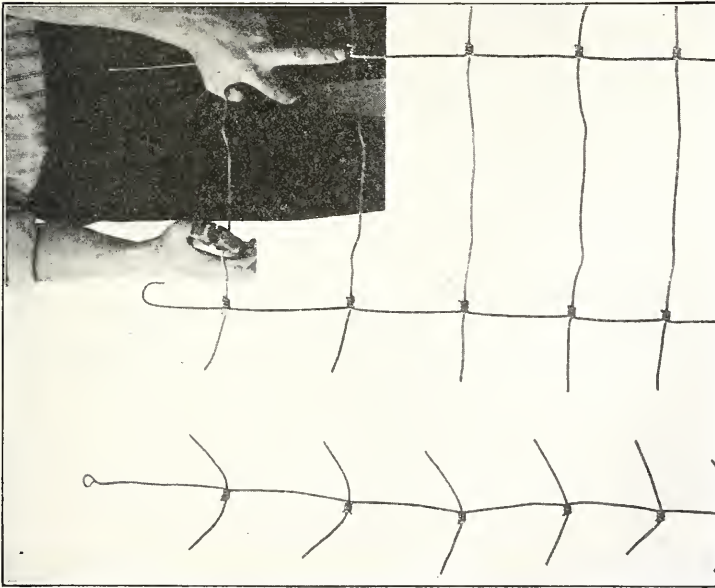


FIG. 8.—WIRE PRONGS MADE OF NO. 9 WIRE ARE JUST AS GOOD AS PATENT KINDS

*Wire-Prong System.*—The wire-prong system (Fig. 8) is comparable in every respect with the twine system, except for the different method of holding the ears. No. 9 wire, woven or electric-weld, may be used. The patent-prong hanger (Fig. 9) can be purchased on the open market.

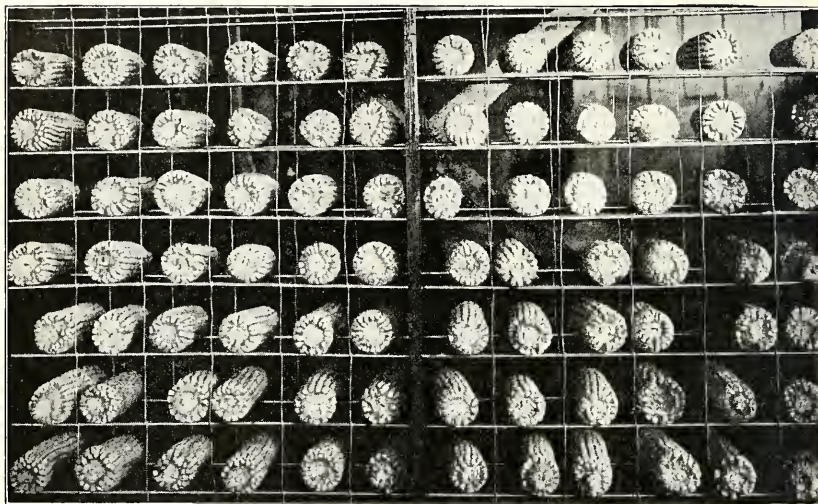


FIG. 10.—WIRE RACK FOR STORING SEED CORN

*Wire-Rack System.*—The wire-rack system (Fig. 10) has been developed commercially. Each rack holds 100 ears. The seed room can be filled with these racks, or alleys may be left, as desired.

#### SPACE REQUIRED FOR STORAGE

If alleys are left in the storage room, making every ear accessible, approximately 20 cubic feet of space is required for each 100 ears stored; if no alleys are left, approximately 12 cubic feet of space is required. (About 80 to 100 ears make a bushel.) Alleys are necessary if the rack, lath, nail, or post system is used. The twine, prong, or wire-rack system can be used with or without alleys, as desired.

## SEED HOUSES

The very common practice of hanging seed ears in corn cribs or other open buildings may secure excellent ventilation, but it offers no protection against freezing. In order to insure a supply of seed in adverse seasons, this method of storage should be discontinued. It is economical but not safe. Under certain conditions seed corn may be stored in a dry basement, but this practice should not be encouraged unless the ventilation is good. Frequently the ventilation of a basement is very poor and the relative humidity of the air high, affording excellent conditions for the growth of mold. There is probably no better place in which to store seed corn than in a well ventilated room in the house, provided this room can be heated. This reduces the danger of freezing to a minimum. There are decided objections, however, to the litter which is certain to result when corn is brought into a dwelling-house. The safest and most desirable arrangement is to have a house built especially for storing seed corn.

In designing a seed-corn house, especial attention must be given to the problems of ventilation and heating. Just so far as possible, advantage should be taken of natural conditions for providing ventilation. The heating of the house will have to be provided for by artificial means. From the standpoint of economy it is desirable to combine the storage room with some other building, as the same foundation and roof will then serve two purposes. The most desirable combination to make will, of course, depend upon local conditions. Work such as washing or butchering, requiring the use of hot water, should not be done in such a house if the steam produced passes into the place used for keeping seed corn.

Fig. 11 illustrates a combined garage and seed house constructed of wood. This building is 16x22 feet. On the first floor there is room for an automobile, a work bench, and a stove. By installing double doors and putting the work bench under the stairway, this building can be used to house two automobiles. The second story will hold from 45 to 90 bushels of seed corn, depending upon the system of storage which is used. Ventilation can be secured by opening the second-story doors. In cold weather these doors are closed and the building heated from a fire in the stove. The heat passes from the first to the second story thru openings around the inside of the walls.

Fig. 12 illustrates a combined garage and seed house the same size as the one described above but constructed of clay blocks with a stucco exterior. Brick may be used in place of the clay blocks and stucco, if desired. If the first floor of such a building is not needed for a garage, it would make an excellent work shop where a forge

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NOTE.—The buildings illustrated by Figs. 11, 12, and 13 have been designed by Mr. C. W. Bullard, architect, of the University of Illinois,

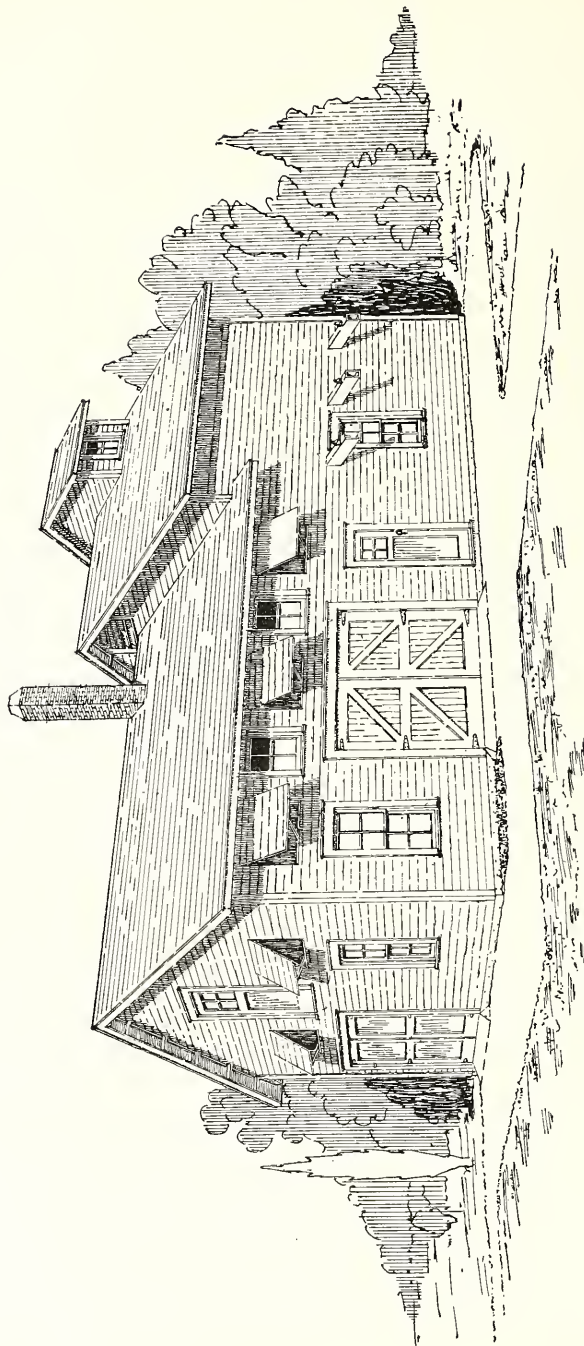


FIG. 11.—COMBINED GARAGE AND SEED-CORN HOUSE. WOODEN CONSTRUCTION

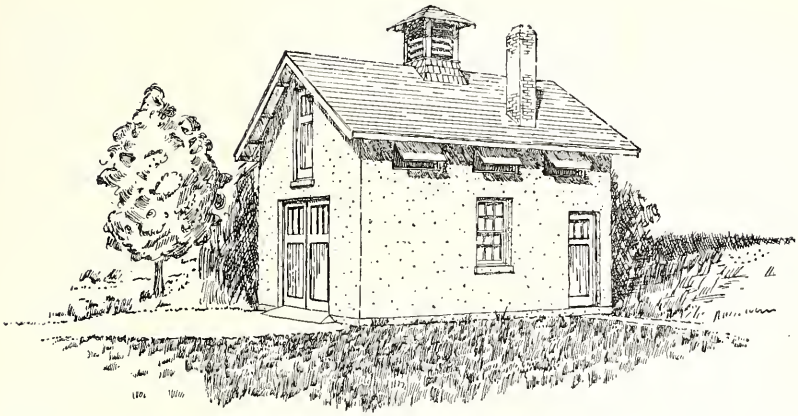


FIG. 12.—COMBINED GARAGE AND SEED-CORN HOUSE. CLAY BLOCK; STUCCO EXTERIOR

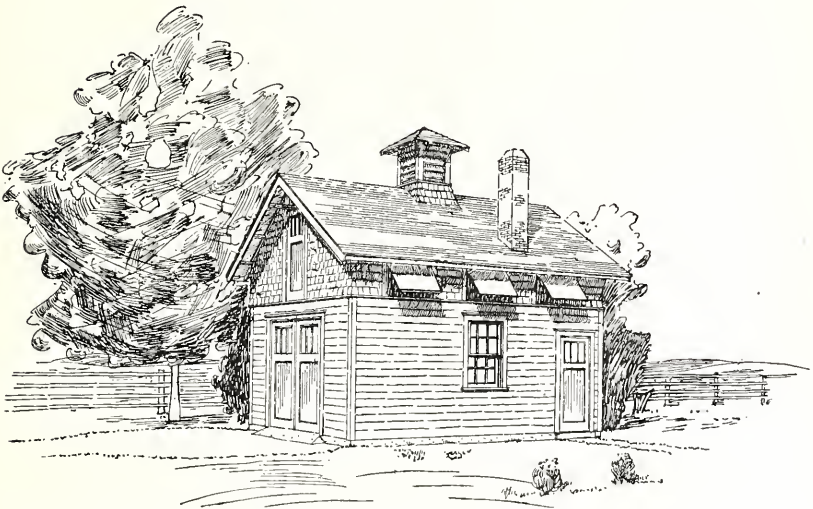


FIG. 13.—COMBINED FARM SHOP, GARAGE, AND SEED-STORAGE HOUSE. WOODEN CONSTRUCTION

could be installed. In cold weather a fire could be started in the stove, which would make the shop a very comfortable place in which to repair machinery.

If a large seed house is desired, the building illustrated in Fig. 13 can be used. This building is 24x46 feet, giving room on the ground floor for a garage, shop, and seed cleaning and grinding room. The second floor will hold from 150 to 300 bushels of seed corn and 1,500 bushels of small grain. The six bins are located in the taller part of the building, and an inside cup elevator is necessary to fill them. A gasoline motor is necessary to generate the power required to operate the machinery in this building. By the use of slides and an elevator the grain in the bins can be cleaned or ground and delivered to a wagon outside the building with no hand work, everything being done by machinery. Two stoves are provided for heating the building.

Working drawings for these buildings will be furnished upon request. Address the Division of Farm Mechanics, College of Agriculture, Urbana, Illinois. The drawings should be ordered by series and number according to the following:

- Series A No. 1 Garage and seed house, wooden construction
- Series A No. 2 Garage and seed house, clay block and stucco construction
- Series A No. 3 Garage, shop, and seed house, wooden construction



UNIVERSITY OF ILLINOIS

# Agricultural Experiment Station

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CIRCULAR No. 215

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## THE WAR GARDEN HOTBED

By C. E. DURST



URBANA, ILLINOIS, MARCH, 1918

# THE WAR GARDEN HOTBED

BY C. E. DURST, ASSISTANT CHIEF IN OLERICULTURE

In order to grow some vegetables successfully in our climate, the plants must be started under glass. Head lettuce, early cabbage, and cauliflower, for instance, require such a long season of cool weather that they could seldom be matured properly in this section if we waited to plant the seeds in the open. In other words, we must furnish them a longer period of cool weather than our climate ordinarily affords, by planting the seeds under glass. On the other hand, sweet potatoes and eggplants require such a long season of warm weather to complete their growth that we could not grow these crops in Illinois at all if we did not give them a good start under protection. Again, the earlier we bring tomatoes into bearing, the larger crops we secure, for on good soil and with a suitable variety, fruit is borne continuously after bearing begins until the plants are destroyed by frost. Even if none of the above circumstances applied to our climate, the starting of many vegetables under glass would be justified by the greater earliness of the products thus obtained.

The best conditions for growing plants are furnished by greenhouses, but these are expensive to build and to operate, and most home gardeners will find it preferable to use a hotbed. The expense of a small hotbed, distributed over its lifetime, will probably not exceed one dollar per season. If the initial cost is too great for one family, two or more may cooperate in the expense and management.

## LOCATION

A hotbed should be located in a well-drained spot protected on the north by a building or a tight fence. On level land, the desired drainage and exposure may usually be obtained by plowing or digging so as to leave a good slope to the south, and by opening a furrow or trench to lead surplus water away.

## KINDS OF HOTBEDS

Hotbeds are always provided with some form of artificial heat. There are three kinds, depending on how the heat is furnished. The fire hotbed<sup>1</sup> is heated from an open fire pit at one end, the smoke and gases being led thru flues extending beneath. The pipe-heated hotbed is heated by hot-water or steam pipes placed under, or around the edges, of the bed. The manure hotbed is heated by fermenting horse manure placed beneath the surface.

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<sup>1</sup>Directions for building a fire hotbed are given in Bulletin 144 of this station.

The manure hotbed is the most practicable for home gardens, and is the only type which will be discussed here. There are two kinds, the surface and the pit hotbed. The pit hotbed is sunk partly below the surface, while the surface hotbed is built entirely above the ground.

### HOW TO CONSTRUCT A PIT HOTBED

Unless the location is poorly drained, the pit hotbed will be found most satisfactory. It is harder to make than a surface bed, but it is warmer, it requires less manure, and it is adapted for much colder weather.

*Thawing Out the Soil.*—The site for a pit hotbed should be covered with 18 to 24 inches of fresh horse manure some time during January in order to thaw out the ground in time for digging. There should be no snow or ice on the surface when this is applied, otherwise thawing may be greatly delayed. The same manure may be used for this purpose that will later be placed in the pit.

*Type of Construction.*—The war garden hotbed, in order to be in keeping with the national policy of conservation, should be economical of constructional materials. Fig. 1 shows a cross-section of a hotbed that not only meets these requirements but is of the greatest efficiency as well. Instead of having plank, brick, or concrete walls that extend all the way to the bottom of the pit, this bed has a frame at the top only, which is supported on bricks or stakes. This plan of construction not only economizes material to the utmost, but permits a pit that extends out 5 or 6 inches farther on all sides than the frame; thus the edges of the bed are kept practically as warm as the center. Furthermore, this kind of frame can be raised without difficulty when the plants become large. It can be taken apart at the close of the season and the lumber stored in a dry place; thus it will last longer than the permanent frame of lumber. With the frame removed, the site can be readily dug up and used for summer crops, whereas a permanent frame would be an obstacle to the preparation and use of the area and might offer a lodging place for insects, plant diseases, and vermin. A temporary frame permits changing the location of the hotbed from year to year if desired. A wood frame radiates less heat than one of brick or concrete.

*When to Make the Hotbed.*—The hotbed should be made early in February. In our climate, the pit should be dug deep enough to hold 12 to 15 inches of manure. Fairly fresh horse manure is the only kind adapted for hotbeds. It should contain only enough bedding to make it fork well. Better results are secured if the manure is piled up two or three weeks in advance and turned occasionally to insure uniform fermentation thruout the pile. Water should be used if necessary to prevent fire-fanging.

*Size and Shape.*—The hotbed should be of a size and shape that will fit the kind of sash at hand. Any odd window sash may be

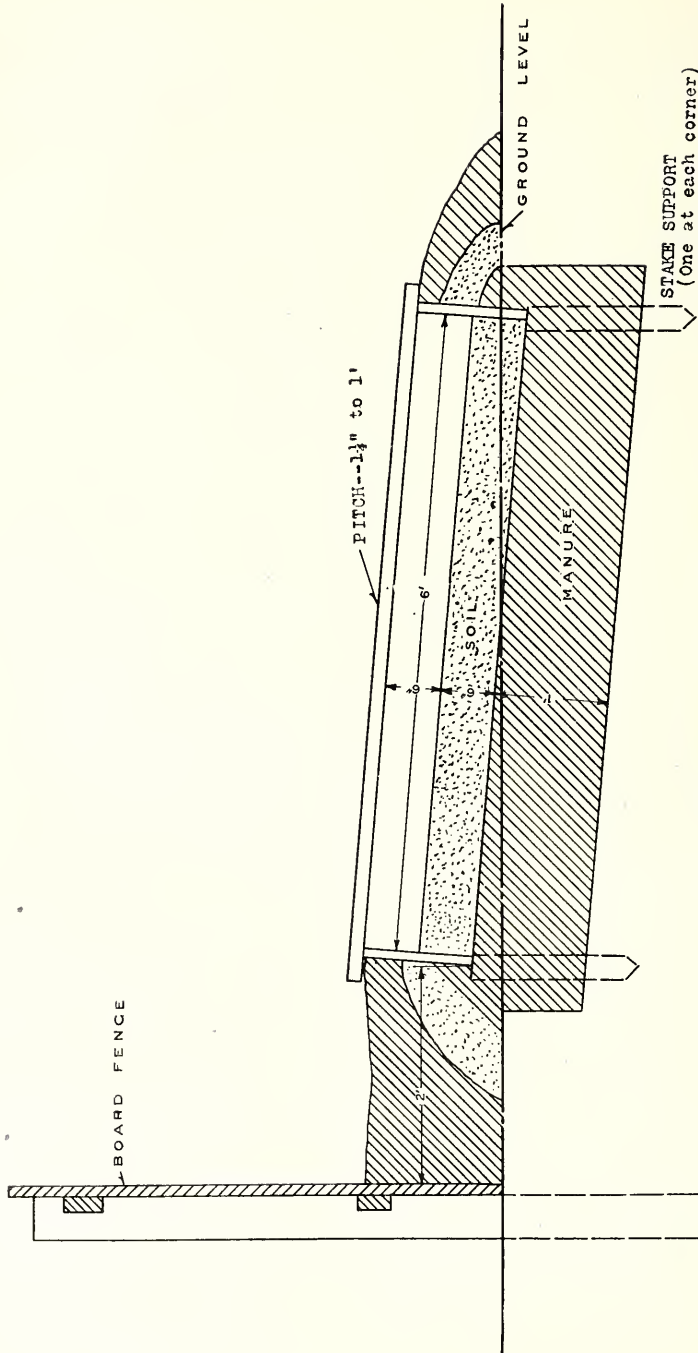


FIG. 1.—CROSS-SECTION OF A PIT HOTBED

used. Standard hotbed sash, as used by gardeners, are 6x3 feet or 6x3 feet, 2 inches, and if the sash are to be purchased, this kind should be selected. Double-strength glass is preferable to the single strength. Four of these sashes make a hotbed of very satisfactory size for a large garden and two of them will serve for a small garden.

*The Frame.*—The frame for a hotbed like that illustrated is made of 12-inch boards. However, narrower boards will give satisfactory results. When the bed is longer than 6 feet, the boards on those sides should be 2 inches thick; otherwise 1-inch lumber will suffice. The parts of the frame may simply be nailed together, but in this case the boards are certain to split at the ends sooner or later. By using cleats across the ends of the boards as shown in Fig. 2, much tighter joints are secured and the frame will last several years longer. An inside support should be placed across the middle of the frame to prevent the sides from bending inward (see Fig. 2).

*Digging the Pit.*—After the frame is made, it should be placed over the hotbed site, and the outline of the pit marked around it with a spade, allowing 5 or 6 inches on all sides. The frame should then be set aside and the pit dug. This should be of such a depth that, when the bed is finished, the surface of the soil inside the bed

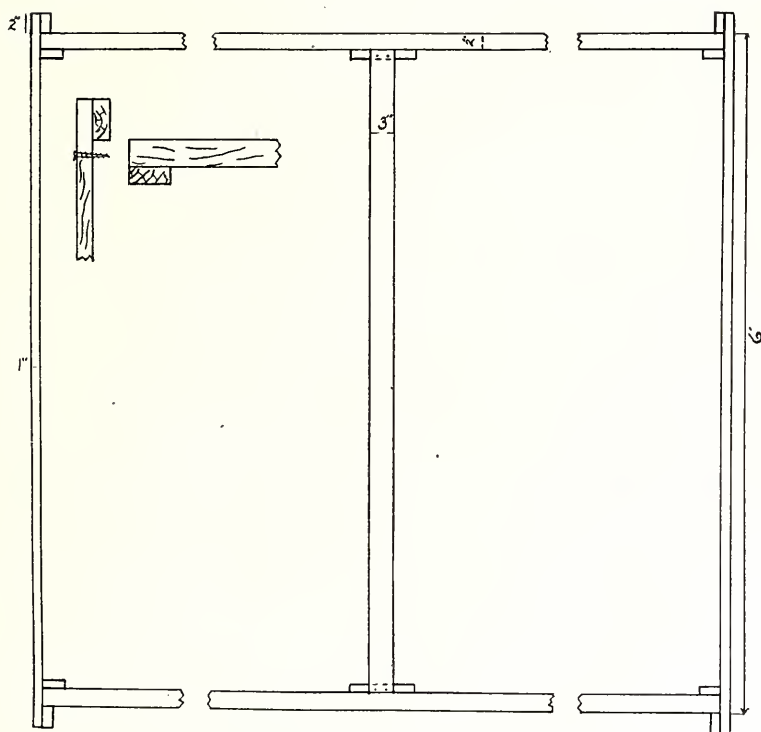


FIG. 2.—METHOD OF JOINTING THE FRAME

will be slightly higher than the ground level on the outside; this precaution may prevent flooding of the bed with water from melting snows or heavy rains. For Illinois conditions, a pit 12 to 15 inches deep will hold enough manure to provide the necessary warmth.

*Setting the Frame.*—After the pit is dug the next operation is to set the frame. Some persons first place the manure in the pit and simply set the frame on top of it, but it is far better to support it on stakes or temporary brick piers to prevent it from settling out of place. One support should be placed near each corner. The frame should be set at a pitch to the south of about  $1\frac{1}{4}$  inches to the foot.

It is important to set the frame squarely so that the sash will fit snugly. To accomplish this in the easiest way, compare the diagonals. When these are of equal lengths, the frame will be exactly square, that is, if the opposite sides of the frame are of equal lengths.

*Placing Manure in the Pit.*—After the frame is set, the manure should be placed in it. Spread about 6 inches over the bottom, shaking to pieces any hard lumps, and tramp it well. Then add another layer, and so on, until the proper height is reached. If the manure promises not to heat readily, moisten it with hot water occasionally when placing it in the pit.

With a frame 12 inches deep, as illustrated (Fig. 1), the manure, when thoroly compacted, should reach slightly above the lower edge. Thus, when 5 or 6 inches of soil are added, there will remain about the right amount of room for the growing plants.

*The Soil.*—If the plants are to be grown directly in the bed, about 5 to 6 inches of soil should be used. If they are to be grown in flats, which is the better method for most plants, only 2 to 3 inches of soil should be placed over the manure. The soil may be added when the bed is made or a few days later. Sand and rotted manure are often mixed with the soil to improve the texture and fertility.

Soil that is too rich in organic matter encourages diseases of the seedlings. Therefore, if the seedlings are shifted to richer soil before they begin to need much plant food, it is better to use a soil that is rather low in organic matter; some florists use pure sand.

It is often difficult to secure a good mellow soil when the beds are made. If the surface soil removed when digging the pit is of suitable nature, this may be used. Sufficient soil is sometimes stored in a cellar or pit during the winter. But it is better to expose it to freezing weather as much as possible. One of the best methods is to place the soil in a conical pile on the outside in the fall. Here it will remain comparatively dry, and by covering it with manure early in January, it will be in good condition when needed.

After the soil or the plant flats are placed in the bed, there should remain 5 or 6 inches of growing space for the plants. As the manure decays, the surface will settle somewhat, thus allowing more room for the plants as they become larger.

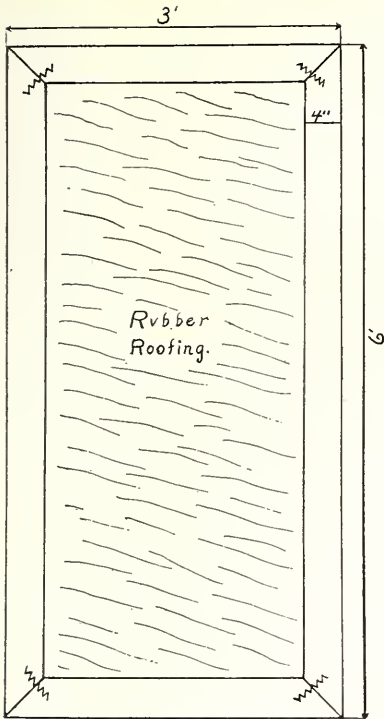


FIG. 3.—HOTBED COVER MADE OF 1x4-INCH STRIPS AND BUILDING PAPER

After the bed is made, the sash should be placed on top, and a layer of soil and manure should be banked around the outside to retain the heat, and to protect the bed from driving winds. All soil and manure not needed should be carted away; if left near the hotbed they may interfere with surface drainage.

*Protection in Cold Weather.*—For protection in cold weather, extra covers in the form of mats, boards, shutters, burlap, or old carpets, should be placed over the sash. Very satisfactory covers can be made of building paper<sup>1</sup> nailed to frames constructed of 1x4-inch strips. The best method of making the frame is to saw the pieces at a 45° angle and connect them by means of corrugated joints, as shown in Fig. 3. Enough straw or manure should be kept at hand to cover over the edges of the frame at night during early spring. In

severe weather, the entire bed may need covering to keep the plants from freezing.

*Time to Plant the Seeds.*—If a good grade of manure is used, the bed will heat violently for a week or ten days. The temperature may rise as high as 125° F. During this time the bed should be aired every day and covered at night. *Do not plant the seeds until the bed has gone thru this period of heating and the temperature has dropped to about 75° or 80° F.*

### HOW TO MAKE A SURFACE HOTBED

Surface hotbeds are well adapted for poorly drained locations and for use late in the season. As already stated, they are difficult to keep warm in cold weather, and require more manure than pit hotbeds. They are easier to make, however, for digging is unnecessary and frozen ground is no hindrance. The manure is simply spread out over the ground and packed well, and the frame and sash are placed on top. More manure is then banked around the outside.

<sup>1</sup>Tar paper should not be used, as the fumes are injurious to plant life.

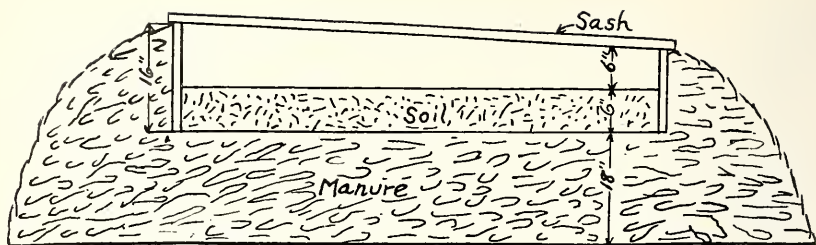


FIG. 4.—CROSS-SECTION OF A SURFACE HOTBED

The same kind of frame as described for the pit hotbed will serve also for a surface bed. The north side of the frame is sometimes made of wider boards than the south side, so that the bottom of the frame may be set practically on the level. In a surface hotbed the frame is scarcely ever placed on any supports other than the manure. A cross-section of a surface hotbed is shown in Fig. 4.

### COLD FRAMES

Cold frames are like hotbeds except that they have no artificial heat of any kind. They are used chiefly for "hardening off" plants grown in the hotbeds or greenhouses before transplanting them to the open. They are covered with glass sash early in the season, but for use in the late spring, muslin or canvas covers fastened to rollers will be found convenient, cheap, and serviceable. A canvas-covered cold frame is shown in Fig. 5.

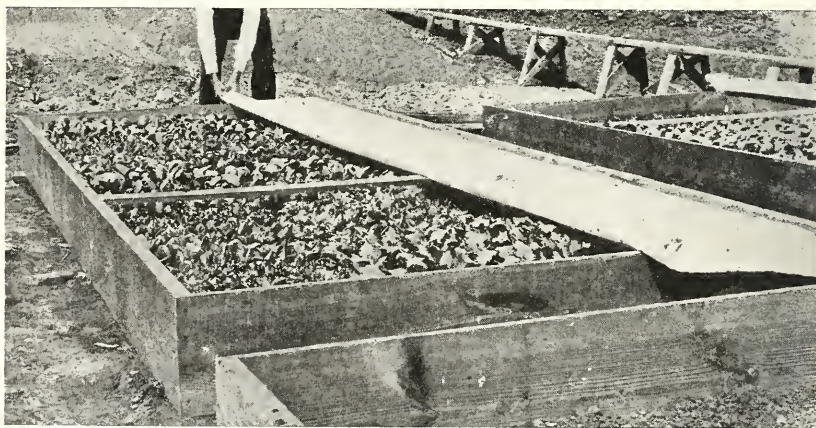


FIG. 5.—CLOTH-COVERED COLD FRAME

The growing of plants in hotbeds and cold frames is discussed in Circulars 198 and 216 of this station.



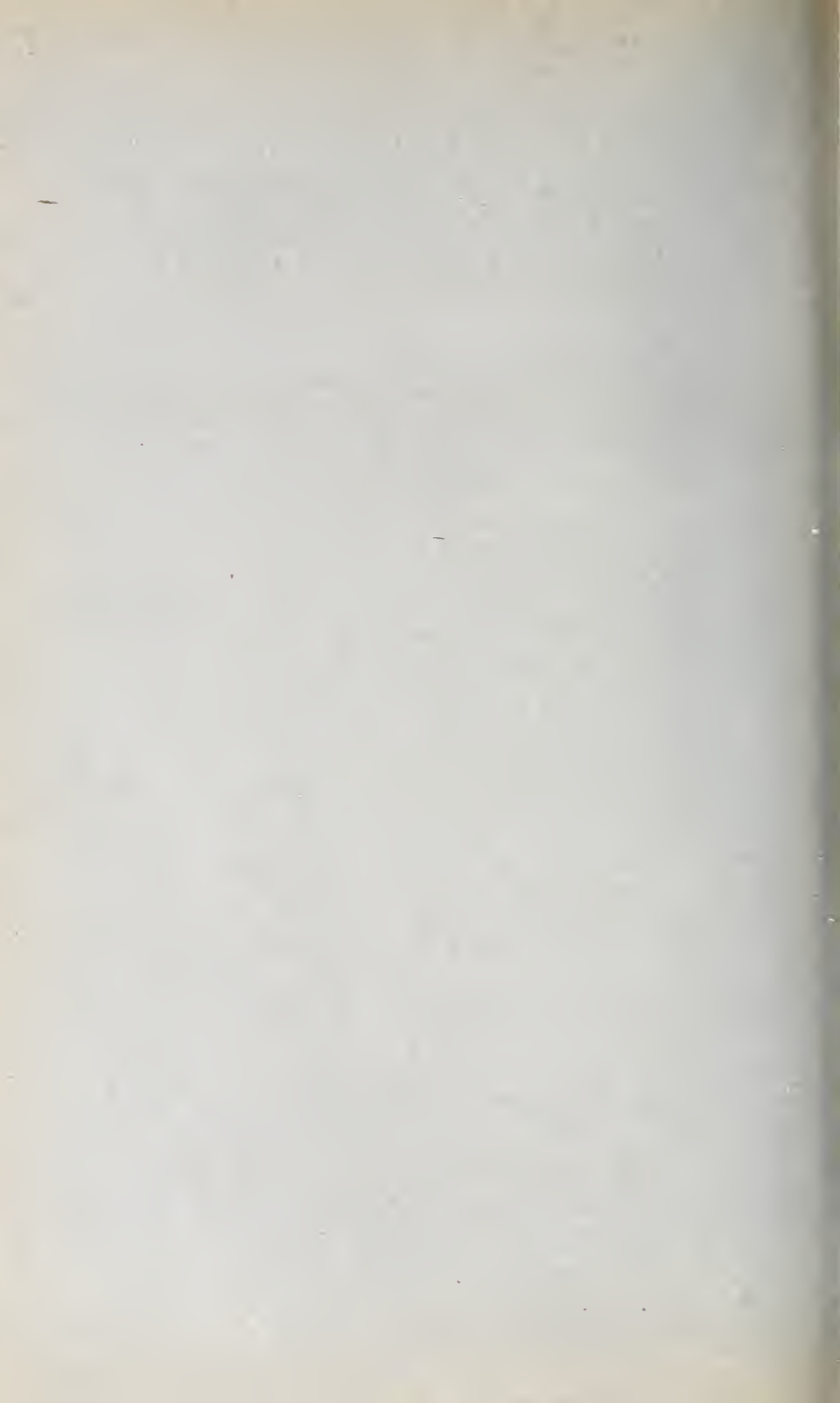
SIMPLE APPLICATIONS  
OF  
TRIGONOMETRY TO ARTILLERY

BY  
AUBREY J. KEMPNER, PH.D.



PRICE TWENTY-FIVE CENTS

PUBLISHED BY  
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URBANA, ILLINOIS



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## PREFACE

In writing this pamphlet it was the purpose of the author to bring some topics which occupy a prominent position in the standard textbooks on artillery into close connection with the mathematical work of a college course in trigonometry.

Mr. W. H. Rayner of the College of Engineering at the University of Illinois, who is at present giving a course in Orientation for Heavy Artillery, very kindly read the manuscript. The author is under obligation to Mr. Rayner for this assistance, since the range of his own knowledge of artillery matters is limited to a careful study of some of the standard textbooks.

The following books are particularly mentioned for reference:

1. *Alger, P. R.*, The Groundwork of Practical Naval Gunnery, 2nd. ed., 1917.
2. *Bishop, H. G.*, Elements of Modern Field Artillery, 2nd. ed., 1917.
3. *Moretti, O.* and *Danford, R. M.*, Notes on Training Field Artillery Details, 6th. ed., 1918.
4. *Spaulding, O. L., Jr.*, Notes on Field Artillery, 2nd. ed., 1917.
5. Gunnery and Explosives, War Department Document No. 391, 1911.
6. Manual of Field Artillery, Vol. 2, War Department Document No. 614, 1917.

The University Library possesses all of these books. In the text 1-4 will be referred to by the name of the author, 5 and 6 will be quoted as "Gunnery" and "Manual", respectively.

Besides, the author had the privilege of reading the proof-sheets of an article by Professor *J. K. Whittemore*, entitled "Firing Data," which has since appeared in the American Mathematical Monthly, October, 1918.

The problems 1 of page 7 and 1, 3, and 5 of pages 8, 9, and 10 are taken from Alger's excellent work; in the problems of Sections B and C emphasis has been laid on the character and on the degree of accuracy of the methods of approximation.

Sections B and C are independent of Section A.

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## SECTION A.

### *Simple Applications of Trigonometry (without use of the "mil"). The Trajectory.*

There is a marked difference between the methods of calculation applied in the Heavy or Coast Artillery and the Mobile or Field Artillery. In the Heavy Artillery angles must be determined much more accurately than in the Field Artillery, and formulae of approximation which are entirely sufficient for the latter service are totally inadequate to the needs of the former. In determining the firing data of a heavy gun, the mathematical operations required are often as delicate as in a refined experiment in physics, involving for example five place logarithms.

In particular, the approximations to which the use of the so-called "mil" measurement of angles leads, are not employed in the Heavy Artillery.

For this reason most problems of the present section are based on data referring to Heavy Artillery.

All definitions and therefore also all formulae hold without change for Field Artillery.

The projectile is assumed to move in vacuo; then the curve of flight, the *trajectory*, is part of a parabola; of course the actual path of the projectile is profoundly modified by the air-pressure. We mention particularly the following points concerning the actual path, the so-called "ballistic curve:":\*

1. While the parabola has an axis of symmetry, the ballistic curve is not symmetric with respect to any line;
2. the ballistic curve lies entirely underneath the corresponding parabola;
3. the ballistic curve is more blunt at the end of the trajectory than at the beginning;
4. the highest point of flight lies in the second half of the curve;
5. for a considerable fraction of the whole path, the ballistic curve follows the corresponding parabola closely.

The great influence of the resistance of the air on the trajectory may be seen from the following little table which gives some interesting data for the three-inch Field Artillery gun.\*\*

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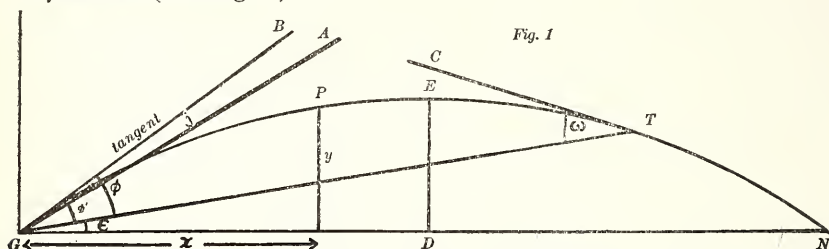
\*Compare for this section: *Alger*, pp. 1-34; *Moretti and Danford*, Ch. III; *Gunnery*, pp. 13-24; *Manual*, pp. 97-101. There is lack of uniformity among authors concerning the notation of the elements defined on pp. 6, 7 of this pamphlet.

\*\**Gunnery*, p. 19.

	Angle of Departure	Muzzle Velocity	Range	Maximum Ordinate	Time of Flight
Air	1° 11.2'	1700 ft. sec.	1000 yds.	17.3 ft.	2.07 sec.
Vacuo (appr.)	1° 11.2'	1700 ft. sec.	1245 yds.	19.4 ft.	2.20 sec.
Air	2° 56.7'	1700 ft. sec.	2000 yds.	93.1 ft.	4.46 sec.
Vacuo (appr.)	2° 56.7'	1700 ft. sec.	3089 yds.	119.2 ft.	4.75 sec.
Air	5° 12'	1700 ft. sec.	3000 yds.	257.0 ft.	7.83 sec.
Vacuo (appr.)	5° 12'	1700 ft. sec.	5434 yds.	370.9 ft.	9.63 sec.
Air	7° 54.2'	1700 ft. sec.	4000 yds.	536.0 ft.	11.25 sec.
Vacuo (appr.)	7° 54.2'	1700 ft. sec.	8200 yds.	853.8 ft.	14.61 sec.
Air	11° 10.1'	1700 ft. sec.	5000 yds.	975.0 ft.	15.12 sec.
Vacuo (appr.)	11° 10.1'	1700 ft. sec.	11440 yds.	1694.0 ft.	20.58 sec.

The table brings out clearly the great flatness of the trajectory at ordinary ranges. For a rough construction of the ballistic curve, the abscissa corresponding to the maximum ordinate may be assumed three-fifths of the horizontal range. (See "Definitions," below).

*Definitions* (see Fig. 1) :



Let  $G$  in Fig. 1 be the gun (more accurately the muzzle of the gun),  $T$  the target,  $GN$  a horizontal line,  $GB$  a tangent to the curve at  $G$ ; then

Curve  $GTN$  = trajectory (in vacuo a parabola, in air the "ballistic curve"),

$GN$  = horizontal range,

$GT$  = range (as a length); also line of sight; line of position,

$\angle NGT = \epsilon$ , angle of site, angle of position,

$GB$  = line of departure,

$\angle TGB = \phi$ , angle of departure,

$\angle NGB = \phi + \epsilon = \psi$ , quadrant angle of departure,\*

$\angle TGA = \phi'$ , angle of elevation,

$\angle NGA = \phi' + \epsilon$ , quadrant angle of elevation,\*

\*When no confusion is possible, the "quadrant angle of departure (of elevation)" is called simply the "angle of departure (of elevation)."



$\angle AGB = j$ , jump,  
 $\angle CTG = \omega$ , angle of fall,  
 $DE =$  maximum ordinate.

The meaning of most of these terms is clear from the figure. A few words must be said concerning the angles  $\phi$ ,  $\phi'$ ,  $j$ ,  $\epsilon$ .

The angle  $\phi'$  (or  $\phi' + \epsilon$  when referred to the horizontal) is the angle which the axis of the bore makes with the line of sight (or with the horizontal) at the instant before firing. However, the axis of the gun changes its direction by a small (experimentally known) angle  $j$ , while the projectile moves in the gun, so that at the moment when the projectile leaves the muzzle of the gun, the axis of the bore, and therefore also the tangent to the trajectory at  $G$ , makes an angle  $\phi' + j = \phi$  with the line of sight (or  $\phi + \epsilon$  with the horizontal). The angle  $j$  is always very small, but may be positive or negative. In aiming the gun, the (known) jump must be taken into account. In case gun ( $G$ ) and target ( $T$ ) be in the same horizontal plane,  $T$  coincides with  $N$ , the "range" coincides with the "horizontal range," because  $\epsilon = 0$ , and the angle of departure is equal to the quadrant angle of departure, the angle of elevation equal to the quadrant angle of elevation. For the parabola in this case the angle of fall is equal to the angle of departure, while for the ballistic curve the angle of fall is then greater than the angle of departure.—The angle of site,  $\epsilon$ , is counted positive when target lies higher than gun, negative when lower.

### PROBLEMS

1. For the following quadrant angles of elevation, jump, site, find the angle of departure and the quadrant angle of departure. Draw curves showing all angles. (Alger, p. 26).

Data			Answers	
$\phi' = 2^\circ$	$j = + 5'$	$\epsilon = 15^\circ$	$\phi = 2^\circ 5'$	$\epsilon + \phi = 17^\circ 5'$
$3^\circ$	$- 3'$	$12^\circ 15'$	$2^\circ 57'$	$15^\circ 12'$
$3^\circ$	$- 7'$	$- 10^\circ 30'$	$2^\circ 53'$	$- 7^\circ 37'$
$4^\circ$	$+ 6'$	$- 9^\circ 37'$	$4^\circ 6'$	$- 5^\circ 31'$
$6^\circ$	$- 8'$	$- 6^\circ 22'$	$5^\circ 52'$	$- 0^\circ 30'$

2. An observation balloon is about 3000 ft. above the surface of the earth; its horizontal distance from an enemy gun is 4000 yds. Find the angle of site.

3. A gun is to fire over a hill 270 ft. high. The horizontal distance of the crest of the hill from the gun is 700 yds. How large must the angle of departure be, at least? Answer:  $7^\circ 20'$ .

4. A target is at a horizontal distance of 3700 yds. from the gun, and is 200 yards lower than the gun. Find the angle of site and the distance in a straight line from the gun to the target (range).

Since we do not assume any knowledge of analytic geometry on the part of the student, the use of coordinates must be briefly explained by the instructor if the following formulae and problems are taken up. The derivation of the formulae involves analytic geometry and some calculus so that they must be accepted without proof. This set is inserted because it affords good exercise in working with trigonometric formulae and because the artilleristic meaning of the problems is very clear.

In figure 1 let  $x, y$  (measured in feet) be the coordinates of any point,  $P$ , of the trajectory in vacuo,  $\psi = \phi + \epsilon$  the angle of departure,  $t$  the time of flight (in seconds) until the projectile reaches  $P$ ,  $V$  the initial velocity (in feet per second), and  $g = 32.2$ , then the following formulae hold:\*

$$x = tV \cdot \cos \psi \qquad y = tV \cdot \sin \psi - \frac{1}{2}gt^2.$$

Eliminating  $t$ , we obtain the relation between  $x$  and  $y$ :

$$y = x \cdot \tan \psi - \frac{g \cdot x^2}{2V^2 \cdot \cos^2 \psi}.$$

From this the horizontal range  $X$  (in feet) is obtained by assuming  $y = 0$ :

$$X = \frac{V^2 \cdot \sin 2\psi}{g}.$$

The total time of flight  $T$  (for the horizontal range  $X$ ) is given by

$$T = \frac{X}{V \cdot \cos \psi} = \sqrt{\frac{2X \cdot \tan \psi}{g}}.$$

## PROBLEMS

1. \*The data being as given in the first two columns of the following table, find the results, in vacuum, required by the other columns. (Alger, p. 32).

\*Alger, p. 28.

Initial Velocity $V$ (f. s.)	Angle of Departure $\phi + \epsilon = \psi$	Horizontal Range $X$ (yds.)	Time of Flight $T$ (secs.)
1000	5° 34'	1999	6.03
1100	4° 35'	1995	5.46
1250	3° 30'	1971	4.74
1400	2° 10'	1533	3.29
1500	7° 28'	6002	12.11
1750	8° 12'	8951	15.50
2000	12° 30'	17500	26.89
2400	7° 40'	15767	19.89
2600	3° 10'	7719	8.92
2900	16° 40'	47840	51.66

2. In the present war the Germans bombarded Paris from the Goin Forest, about 70 miles from Paris. Show that, in vacuo, and assuming  $g = 32.2$ , the initial velocity must be at least between 3449 and 3450 f. s., and that the corresponding time of flight would be  $151.5 +$  sec. (The expression for  $X$  shows that for a given  $V$  the range is greatest for  $\psi = 45^\circ$ ).

3. The data being as given in the first three columns of the following table, find the result, in vacuum, required by the fourth and fifth columns (see Fig. 1), (Alger, p. 33).

Initial Velocity $V$ (f. s.)	Angle of Departure $\phi + \epsilon = \psi$	$t$ (secs.)	$x$ (yds.)	$y$ (ft.)
1000	5° 34'	3.01	999	146
1100	4° 35'	2.73	998	120
1250	3° 30'	2.37	986	90
1400	2° 10'	1.64	765	44
1500	7° 28'	6.05	2999	590
1750	8° 12'	5.00	2887	846
2000	12° 30'	20.00	13017	2218
2400	7° 40'	10.00	7929	1592
2600	3° 10'	8.00		
2900	16° 40'	30.00		

In the first five questions of this problem, and in the eighth,  $y$  is practically the maximum ordinate.

4. A body is projected in vacuum with an angle of departure of  $45^\circ$ , and an initial velocity of 200 f. s. Compute the coordinates of its position after 6 seconds.

Ans.:  $x = 848.5$  ft.,  $y = 268.9$  ft.

5. The measured range in air of a 12" shell of 850 pounds weight, fired with 2800 f. s. initial velocity, and an angle of departure of  $7^{\circ} 32'$ , was 11,900 yds., and the time of flight was 19.5 seconds. What would the range and time of flight have been in vacuum? (Alger, p. 34).

Ans.:  $X = 21097$  yds.,  $T = 22.8$  seconds.

6. Vigneulles, in the Saint Mihiel salient in France, is about 24 miles from the German fortress of Metz. Under what angle of departure would an American 12" gun with initial velocity 2800 ft. per sec. have to be fired at  $V$ . to hit  $M$ . (neglecting the air resistance)?

Ans.:  $\psi_1 = 15^{\circ} 40.9'$ ,  $\psi_2 = 74^{\circ} 19.1'$ . Explain why there are two answers. Would  $\psi_1$  ( $\psi_2$ ) have to be increased or decreased when the air resistance is taken into account?

Problems of the type given in this section will make clear to the student the mathematical background of problems dealing with "danger space" and "clearing the crest" or "firing over a mask." However, such problems are treated in Field Artillery by very simple methods of approximation and are for this reason omitted here.

## SECTION B.

### *Definition and Simple Applications of the "mil"—The Parallax.*

A first difficulty which the student will encounter in artillery work lies in the fact that the U. S. Field Artillery measures angles generally in so-called "mils".\* The sighting instruments of the guns are graduated in this unit, instead of degrees, and the tables are all made out accordingly. The mil will therefore have to be carefully considered in a trigonometry course which is to prepare for artillery service. In the Heavy and Coast Artillery the conventional system of measuring angles in degrees, minutes and seconds is used together with the mil system. It should also be noted that the Field Artillery, which has up to the present measured lengths in yards, is, as far as length measurements are concerned, in a stage of transition, since, in order to agree with French practice, lengths are in the future to be measured in meters.

According to some text-books the mil was originally defined as one one-thousandth of a radian.\*\*

There would thus be  $2000 \cdot \pi = 6283$  (approx.) mils in  $360^\circ$ . This would be a very inconvenient unit for numerical computations. The mil actually adopted in the army is the sixteen-hundredth part of a right angle:

$$1 \text{ mil} = \frac{1}{1600} \text{ right angle} = .05625^\circ = \frac{27'}{8} ,$$

$$6400 \text{ mils} = 360^\circ, \quad 3200 \text{ mils} = 180^\circ, \quad 1600 \text{ mils} = 90^\circ.$$

The student may verify that the mil is about 4 seconds (that is, about 2 per cent), smaller than 1-1000 radian.

The following is quoted from official instructions of the United States Army:

*Definition: All U. S. mobile artillery sights will be graduated clockwise in mils. A mil is 1-6400 of a circle. The arc which subtends a mil at the center of a circle is, for practical purposes, equal to 1-1000 of the radius. The arc and its tangent are nearly equal for angles not greater than 350 mils.\*\*\**

\*Compare for this section: *Bishop*, p. 47 ff.; *Moretti-Danford*, pp. 57, 58 for definitions of mil and parallax; numerous applications pp. 62-130; *Gunnery*, pp. 33, 34, 38; *Manual* pp. 115-121.

\*\*According to other text books the mil was first defined as arc tan .001. The difference between this angle and the angle 1-1000 radian is only about one millionth of one minute.

\*\*\* $350 \text{ mils} = \frac{350 \cdot 360^\circ}{6400} = 19 \frac{11}{16} = 20^\circ--.$

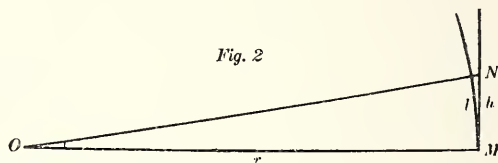
## PROBLEMS

1. Change 1 mil to degrees; to minutes; to seconds.
2. Change to mils:  
 $1^\circ$ ;  $1'$ ;  $1''$ ;  $60^\circ$ ;  $200^\circ$ ;  $75^\circ 20'$ ;  $142^\circ 35'$ ;  $40'$ ;  $5^\circ 10'$ ;  $17'$ ;  $1^\circ 25'$ .
3. Change to degrees and draw the angles:  
 100 mils; 80 mils; 2400 mils; 1360 mils; 5200 mils; 50 mils.
4. Given a triangle with angles  $120^\circ$ ;  $51^\circ 30'$ ;  $8^\circ 30'$ , change all angles to mils and check by  $180^\circ = 3200$  mils.
5. Given a triangle with angles 1280 mils; 760 mils; 1160 mils. Change all angles to degrees and check.

In military textbooks an abbreviation for "mil" does not seem to be in use. Frequently the angle in mils is given without any notation, as  $A = 310$ .

The last two sentences quoted in the official instructions point toward the most important applications of the mil, which we now discuss.

In the right triangle  $OMN$  (Fig. 2) let  $\angle O = a$  radians  $= k$  mils,  $OM = r$ ,  $MN = h$ , and let  $l$  be the arc between  $OM$



and  $ON$  of a circle about  $O$  as center. Then  $\tan O = h:r$ . For very small angles  $O$  the ratio  $h:l$  is very nearly unity; with increasing angles  $O$  the ratio  $h:l$  also increases; but for  $O = 20^\circ$  the fraction  $h:l$  has only reached the value 1.04+. For  $O = 15^\circ$ ,  $h:l = 1.02+$ ; for  $O = 10^\circ$ ,  $h:l = 1.01+$ ; for  $O = 5^\circ$ ,  $h:l = 1.003-$ . The error made by replacing the arc by the tangent is thus about four to five per cent for a 350 mil angle, about two per cent for a 270 mil angle, about one per cent for a 150 to 200 mil angle, about  $\frac{1}{3}$  per cent for a 75 to 100 mil angle. Therefore  $h:r = l:r$  (approx.) for small angles  $O$ .\* But  $l:r = a$ , and  $a = k:1000$  (appr.), hence, for small angles,  $h:r = k:1000$  (appr.),

$$k = h:(r/1000).$$

In the most important applications of the mil in gunnery  $r$  is the gun range and measures usually some thousands of yards, while  $h$  is comparatively small (height of a tree, or of a hill, or a high building,

\*Trigonometrically,  $h:r = l:r$  (appr.) expresses that  $\lim (\tan x:x) = 1$  when  $x$  approaches 0 and is measured in radians.

etc.; or it may be a comparatively short line in the horizontal plane, such as the distance from the gun to the battery-commander's station).

We have thus the important

RULE: *If  $r$  and  $h$  are both measured in the same unit, then the angle subtended by  $h$  in Fig. 2 is  $h : \left(\frac{r}{1000}\right)$  mils (appr.).*

According to this rule 1 yd. subtends at 1000 yds. an angle of one mil, 2 yds. subtend at 2000 yds. an angle of 1 mil, etc.

A sighting instrument graduated in mils enables an observer to determine immediately each of the quantities  $r$ ,  $h$ ,  $k$  from the other two. In estimating the error caused by applying the rule stated above, two sources of error must be considered. Firstly, the mil is used as if it were exactly  $1/1000$  radian, thus causing a constant error of about two per cent. Secondly, we have an error which varies with the angle and which is caused by replacing  $l:r$  by  $h:r$ . These two errors tend to counteract each other. Therefore the rule gives correct results when the error from the second cause is as large as the error from the first cause, that is, about two per cent. This happens for an angle in the neighborhood of fifteen degrees (about 270 mils), as we know. For this question compare *Whittemore*.

### PROBLEMS \*

1. Given that a target is 3000 yds. distant from the gun and 200 feet higher than the gun. Find the angle of site. (See Fig. 1).

2. Find the angle of site when

(a) range = 2500 yds., target 200 yds. higher than gun.

(b) range = 4700 yds., target 150 ft. lower than gun.

Ans. (b): — 10.6 mils.

3. A tower of 150 ft. height subtends at the gun an angle of 30 mils. Find the distance from gun to tower.

Ans.: About 5000 feet.

4. A tree subtends at a distance of 1500 ft. an angle of 60 mils. How high is the tree?

5. Find the error made in finding  $k$  in the following problems by the rule given in the text.

---

\*Most problems involving the mil are conveniently worked by slide-rule.

- (a)  $r = 2000$  yds,  $h = 100$  ft.
- (b)  $r = 2000$  yds,  $h = 400$  ft.
- (c)  $r = 2000$  yds,  $h = 1000$  ft.
- (d)  $r = 2000$  yds,  $h = 2000$  ft.
- (e)  $r = 2000$  yds,  $h = 6000$  ft.
- (f)  $r = 2000$  yds,  $h = 10000$  ft.
- (g)  $r = 2000$  yds,  $h = 20000$  ft.

### PARALLAX. CORRECTION OF PARALLAX FOR OBLIQUITY

*Definition:* The parallax of a line at a point is the angle subtended by the line at the point.

In Field Artillery this angle is measured in mils.

Assume first that the point  $O$  at which a line  $MN = h$  subtends an angle of  $k$  mils lies on the perpendicular bisector of  $h$ . (See Fig. 3).

To find the distance  $OP = l$  of  $h$  from  $O$ , we should have

$$l = h/2 \cdot \cot k/2.$$

However, when  $l : h$  is a small fraction, we may apply the rule of page 13 and obtain:

$$k/2 = (h/2) : (l/1000), \text{ or } l : 1000 = h : k, \text{ or}$$

$$l = \frac{1000 h}{k} = h : \left( \frac{k}{1000} \right)$$

Since for  $h : l$  small,  $l : l'$  nearly unity, we may in this case also use:

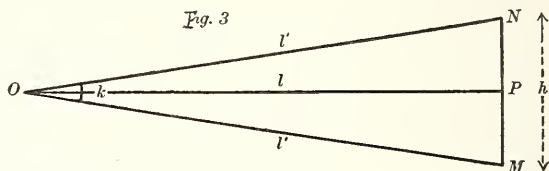
$$l' = \frac{1000 h}{k} \text{ (appr.)}.$$

We assume from now on the fraction  $h/l$  so small that our approximation formulae hold.

If  $O$  does not lie exactly on the perpendicular bisector of  $h$ , but so close to it that  $\triangle ONM$  is approximately isosceles,  $(1000 h) : k$  will still give a good approximation for the distance of  $O$  from  $h$ .

If  $\triangle ONM$  is not approximately isosceles, this expression cannot be used. We proceed then as follows:

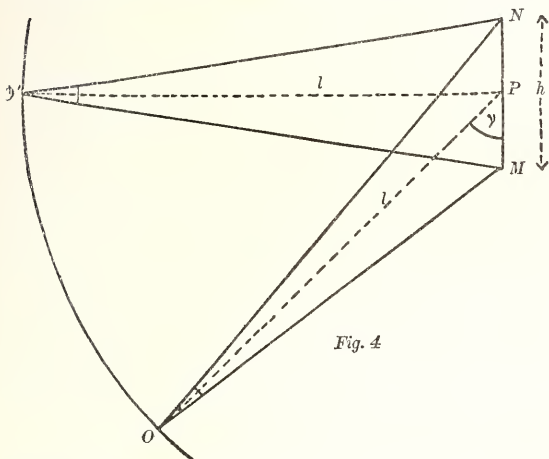
Consider (Fig. 4) the parallax of  $MN = h$  at  $O$ . Draw the perpendicular bisector  $PO'$  of  $MN$ , making  $PO' = PO = l$  (say).





Then  $\angle NO'M = h : \frac{l}{1000}$  mils (appr.), while  $\angle NOM$ , the angle we

are interested in, is obviously smaller. Therefore, a correction must be



applied to  $O'$  to obtain  $O$ , (or to  $O$  to obtain  $O'$ ). For this purpose the angle  $MPO = \gamma$ , the so-called "angle of obliquity", is introduced.

It is easily seen that if we assume a relation of the form  $O = f(\gamma) \cdot O'$ , then  $f(\gamma)$  increases from 0 to 1 when  $\gamma$  increases from  $0^\circ$  to  $90^\circ$ ; the general behaviour of the factor  $f(\gamma)$  is therefore similar to the sine function.

In Field Artillery, the following values are usually chosen, with corresponding rough interpolations:

In Field Artillery, the following values are usually chosen, with corresponding rough interpolations:

$\gamma$	$0^\circ$	$30^\circ$	$45^\circ$	$60^\circ$	$90^\circ$
$f(\gamma)$	0	.5	.7	.9	1

The angle  $\gamma$  is frequently estimated; *its accurate value is not required in general.*\*

The factor  $f(\gamma)$  is the "factor of obliquity"; its application gives the "correction for obliquity." When greater accuracy is required, small "obliquity tables" are used.

*Example:* Given  $h = 300$  yds.,  $OM = 4400$  yds.,  $\angle MNO = 45^\circ$ . To find  $\angle MON$ .

*Solution:* First method. Let  $\angle MON = k$  mils.

Since  $MN$  is small as compared with  $OM$ , the angle of obliquity  $\gamma$  will be approximately equal to  $\angle MNO$ ; we assume  $\gamma = 45^\circ$ .

In  $\triangle O'MN$ , if  $k$  denotes the number of mils in  $O'$ ,

$$k' = 300 : \frac{4400}{1000} = 68.2 \text{ — mils.}$$

\*It may therefore be replaced by angle  $ONM$ , if convenient (since  $h:l$  is assumed small).

But  $k = k' \sin \gamma = 68.2 \cdot .7 = 47.7 = 48$  — mils.

Another method for treating the correction for obliquity is often employed, for example in the problem of determining the “deflection” in indirect firing (see p. 27). This method will be sufficiently explained if we apply it to the example just worked out. ( $M$  may be assumed to be a gun,  $O$  the target,  $MO$  the range,  $N$  the “battery commander’s station”; the required angle  $MON$  is a so-called “offset”).

*Solution:* Second method. Drop a perpendicular  $MN_1$  from  $M$  on to  $NO$ , then

$$MN_1 = h \cdot \sin MNO = 300 \cdot \sin 45^\circ = 300 \cdot .7 = 210 \text{ (appr.)}$$

From  $\triangle OMN_1$ , then, by the rule of p. 13.

$$k = h : \left( \frac{ON_1}{1000} \right) = h : \left( \frac{OM}{1000} \right) \text{ (appr)} = 210 : \frac{4400}{1000} = 48 \text{ — mils.}$$

To estimate the accuracy of our work by these two methods, solve  $\triangle OMN$  by the theorem of sines, obtaining  $O = 2^\circ 45' 48'' = 49.1$  mils.

## PROBLEMS

1. A line of length  $h$  yards has a parallax of  $k$  mils at a distance  $l$  yards from the line. The angle of obliquity is  $90^\circ$ . From any two values in each line of the following table find the remaining one by the rule of p. 13.

$h$	$l$	$k$
100	2000	50
200	1000	200
330	2200	150
220	2500	88
270	500	540

2. Find in the preceding problem for each question the error in  $k$  due to the use of the method of approximation.

3. The quantities  $h, l, \gamma, O = k$  mils, have the meaning indicated in Fig. 4. Solve in each line for the unknown quantity:

$h$	$l$	$\gamma$	$k$
200	1500	$60^\circ$	?
400	?	$45^\circ$	60
?	900	$30^\circ$	100

4. A ship of 650 ft. length is sailing due northwest. For an observer on another boat due west her parallax is 55 mils. How far are the ships apart?

Ans.: 8400— ft. (taking the corection factor .71).

5. A bridge crosses a river 850 ft. wide; the river flows in a straight course. From a boat on the river the bridge appears under an angle of  $4\frac{1}{2}$  degrees. Find approximately the distance from the boat to the bridge.

$$\text{Ans.: } \frac{850}{80} \cdot 1000 \text{ ft.}$$

## SECTION C.

### CALCULATION OF FIRING DATA FOR DIRECT AND INDIRECT FIRE.

*For greater simplicity we assume in this section throughout that the gun (more accurately, the muzzle of the gun), the target, and, as far as they will be used, the "battery commander's station" and the "aiming point" all lie in a horizontal plane.*

Moderate differences in altitude between the gun and the target do not offer serious difficulties in practice.

In pointing a gun it is first necessary to know the range and direction of firing.\* The determination of these quantities is the only problem which we shall discuss in this section. When range and direction are known, "range tables", constructed for each type of gun, give the angle of elevation under which the gun must be fired.

In the Field Artillery the range is determined by rough computations or measurements, and an error of a hundred yards or more is apparently accepted as normal; corrections are based on actual observations of the results of firing. In the Coast and Heavy Artillery, on the other hand, every effort is made to secure a hit with one of the first shots.

We abstract entirely from relatively small, but very important corrections which must be made in pointing the gun and which are due to rifling, wind, etc. for the *direction*, and to wind, temperature, air-pressure, etc. for the *range*.

#### OUTLINE

- I. Determination of range when target is visible from gun.
- II. Determination of range when target is not visible from gun.
- III. Determination of direction of firing when target is visible from gun.
- IV. Determination of direction of firing when target is not visible from gun. (Deflection).

#### DETERMINATION OF RANGE.

For the determination of the range several methods are available of which we mention the following:

- I. *Target visible from gun; find range.*
  - Ia. *From the maps.*

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\*Compare for this section: *Bishop*, pp. 49-59; *Morotti and Danford*, pp. 68-130; *Spaulding*, Ch. V; *Gunnery*, Ch. V; *Manual*, pp. 115-128.

For the whole Western Front in Europe there exist extremely accurate maps of each "sector", covering the whole possible field of operations. Such maps are covered with a system of "index lines", that is, by two sets of parallel straight lines which divide the map into squares. The most detailed maps are on a scale of 1 : 5000, so that one square mile in nature is represented by about one square foot on the map. When the target is visible, its position on the map can be fairly accurately determined, and since the position of the gun on the map is likewise known,\* the range is found either by actual measurement on the map or by using the Theorem of Pythagoras in an obvious way.

Ib. *By using range finding instruments.*

Theoretically, the simplest range finder is an instrument consisting of two telescopes joined by a rigid (horizontal or vertical) bar of known length.\*\*

The telescopes are both focussed on the target and the angles read off which the lines of vision make with the horizontal (or vertical) bar. In the triangle formed by the bar and the two lines of vision one side and two angles are known and the required distance (one of the remaining sides) may be easily determined. (Since the range is large as compared with the distance of the telescopes, the parallax method with correction for obliquity would apply). However, this type of range finder is not sufficiently accurate, since a very small error in the angles causes a large error in the distance, on account of the short base. (Compare Ic). A type of optical range finder, based on the refraction of light in a system of prisms, is actually used.

Ic. *Trigonometric Methods and Use of Parallaxes.*

A point  $C$  is selected (which we assume, for simplicity, to lie in a horizontal plane with gun and target) from which both gun  $G$  and target  $T$  are visible. The distance from gun to  $C$  is measured, and the angles at  $G$  and at  $C$  in  $\triangle GCT$  are observed. Then the range  $GT$  is determined by the theorem of sines. Obviously this is again the method of Ib except that the base is now chosen arbitrarily.

The work is considerably simplified if  $G$  is made equal to  $90^\circ$ , as is frequently possible. The problem then reduces to the solution of a right triangle.

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\*In Heavy Artillery, trigonometric (surveying) methods are frequently employed, when the position of the gun must be very accurately determined (with reference to fixed points on the map). We assume the location of the gun on the map to be known with sufficient accuracy.

\*\*In one instrument, Berdan's range finder, a horizontal bar of six feet length is employed.

## PROBLEMS

1. Assuming  $G = 90^\circ$ , find the range  $GT$  for
  - (a)  $GC = 820$  yds.,  $C = 75^\circ 55'$ .
  - (b)  $GC = 200$  yds.,  $C = 87^\circ 5'$ .
  - (c)  $GC = 100$  yds.,  $C = 88^\circ 25'$ .
2. In problem 1, find in (a), (b), (c) the change in the range due to an increase in  $C$  of  $5'$ .
3.  $GC = 1500$  yds.,  $C = 72^\circ 30'$ ,  $G = 86^\circ 20'$ . Using the theorem of sines, find range  $GT$ .
4.  $GC = 550$  yds.,  $C = 45^\circ 50'$ ,  $G = 125^\circ 25'$ . Find range  $GT$ .

*When  $GC$  is small as compared with the range, and  $G = 90^\circ$ , the range may be found by the rule of p. 13.*

*Example:* From  $G$  a line  $GC$  of 150 yds. length is measured off at right angles to  $GT$ . The angle at  $C$  is measured,  $C = 1560$  mils. Find range  $GT$ .

*Solution:*  $T + C = 90^\circ = 1600$  mils,  $T = 40$  mils. Applying our rule, we have, for range  $= x$  yds.

$$150: \left( \frac{x}{1000} \right) = 40, x = \frac{150 \cdot 1000}{40} = 3750 \text{ yds.}$$

(The true value of  $x$  is  $150 \cdot \cot 2^\circ 15' = 3818$ — yds.).

Compare for this kind of work the problems of pp. 13-14.

*When  $GC$  is small as compared with the range, and  $G$  different from  $90^\circ$ , the range may be found by using parallaxes and sufficiently accurate obliquity-factors.*

*Example:* From the gun  $G$  a line  $GC$  of 200 yds. length is measured off.  $\angle G$  is found to be  $43^\circ 52\frac{1}{2}' = 780$  mils,  $\angle C$  is  $133^\circ 52\frac{1}{2}' = 2380$  mils. Find range  $GT = l$

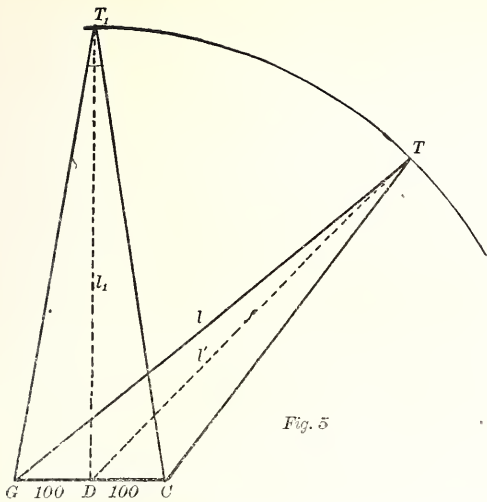
- (a) by solving the triangle  $GCT$ ,
- (b) by using the parallax method.

*Solution:* (a). From  $T = 180^\circ - (G+C) = 2^\circ 15'$ ,

$$l: \sin 133^\circ 52\frac{1}{2}' = 200: \sin 2^\circ 15',$$

we find  $l = 3672$  yds.

(b). Compare p. 15, first method. Fig. 5 is only schematic. The student is advised to draw a figure to scale. We assume that  $GT = l$



may be replaced with sufficient accuracy by  $DT = l'$  (in case the error thus committed is too serious, an estimated correction is easily applied). Since  $GC$  is small as compared with  $GT$ , the angle of obliquity  $TDC = \gamma$  may be with sufficient accuracy taken to be equal to  $\angle TGC$ . Then, by Section B,  $\angle GT_1C = \angle GTC : \sin TGC$  (approx.). Taking  $\angle TGC$  as  $45^\circ$  (instead of  $43^\circ 52\frac{1}{2}'$ ; in corrections for obliquity rough

approximations to the angles are always considered sufficient), we have  $T = 3200 - G - C$ , and  $T_1 = T : .71 = 40 : .71$  mils =  $56 +$  mils.

$$\text{Therefore } 56 = 200 : \frac{GT_1}{1000}$$

$$GT_1 = GT \text{ (appr.)} = 3570 + \text{ yds.} = 3600 - \text{ yds.}$$

The error committed is about 100 yds.

## PROBLEMS

1. In the triangle formed by the gun ( $G$ ), the target ( $T$ ), and the point  $C$  assume

- (a)  $GC = 300$  yds.,  $G = 90^\circ$ ,  $C = 1520$  mils,
- (b)  $GC = 180$  yds.,  $G = 90^\circ$ ,  $C = 1560$  mils,
- (c)  $GC = 600$  yds.,  $G = 90^\circ$ ,  $C = 1400$  mils.

Find range  $GT$  by solving the right triangle and also by using the rule of p. 13, and find the error.

2. In the triangle  $GCT$  assume

$$GC = 300 \text{ yds.}, G = 2000 \text{ mils.}, C = 1140 \text{ mils.}$$

Find the range  $GT$  by using parallaxes, and determine the error committed.

Ans.: By the theorem of sines 4585 yds.; by parallax method 4500 (choosing obliquity factor .9).

II. *Target not visible from gun; find range.*

IIa. Frequently the position of the target on the map is known and the method indicated under Ia may be applied.

IIb. In case the position of the target  $T$  on the map is not known with sufficient accuracy and cannot be determined for example by aeroplane observations or by aeroplane photography, trigonometric methods may be applied as follows:

Select two points  $A, B$  whose distance can be measured and which are visible each from the other, and such that  $T$  is visible from  $A$  and from  $B$ . Measure angles  $TAB$  and  $ABT$ . Then in  $\triangle ABT$  any quantity can be determined. Enter the points  $G, A, B, T$  on the map and find range  $GT$  by measurement or by the Theorem of Pythagoras. It is of course assumed that the relative positions of  $A$  and of  $B$  to  $G$  are known.

Other trigonometric methods are easily devised.

DETERMINATION OF DIRECTION OF FIRING.

III. *Target visible from gun.*

Usually the gun and target are not visible one from the other. When the target is visible from the gun, it is possible to sight directly, taking afterwards in aiming the gun the necessary corrections into account. This is called "direct firing" or "direct laying."\* In this case only the range has to be determined which may be done by one of the methods explained. Another method consists in entering gun and target on the map and determining the direction of firing by means of map and compass. (See *Moretti and Danford*, p. 113).

IV. *Target not visible from gun.—Aiming Point; Deflection.*

In this problem we may assume not only the range known but also the length of any other segment which may be useful, provided at least one end point of the segment can be reached by an observer. (By the methods explained in I and II).

IVa. Assume a point  $B$  chosen as the "Battery Commander's Station", from which both gun and target are visible and such that  $BG = c$  can be measured. Angle  $GBT$  is measured at  $B$ . In  $\triangle BGT$  two sides (range and  $c$ ) and the angle opposite one side are known

\*See Remarks, p. 29.



so that  $\angle BGT$  can be determined by the theorem of sines. The gun first aims in the direction  $GB$ , and then swings through the angle  $BGT$ . Since in practice the range is usually some thousands of yards while  $c$  is a few hundred yards, the given angle lies opposite the larger side and there is no ambiguity.

It is clear that (for  $c/\text{range}$  sufficiently small) the parallax method may be used to determine  $T$  and hence  $G = 3200 - B - T$  mils. If, in particular, the angle at  $B$  is not far different from  $90^\circ$ , no correction will be required for obliquity.—IVa. is not usually applied in practice, in spite of its theoretical simplicity (compare Remarks, p. 29). It may serve to arouse interest in the solution of triangles.

### PROBLEMS

1. Review problem 5, page 13.
2. For each set of data in the following table find  $\angle BGT$  by trigonometry and also by the method of parallaxes. In each case find the error caused by the method of parallaxes. In which cases does inspection show that the method of parallaxes will not give satisfactory results? (See "Definition of mil," p. 11; compare pp. 14, 15 and examples pp. 15, 16, 20).

	$BG$	$GT$	$GBT$
(a)	250 yds.	3200 yds.	$60^\circ$
(b)	320 ft.	1050 yds.	$45^\circ$
(c)	700 ft.	900 yds.	$45^\circ$
(d)	275 yds.	300 yds.	$30^\circ$
(e)	400 ft.	1800 yds.	$60^\circ$
(f)	1250 yds.	750 yds.	$30^\circ$

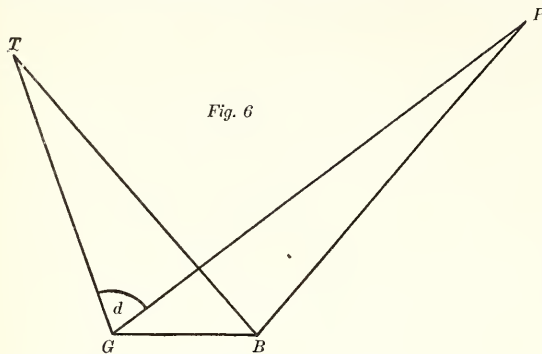
#### IVb. Use of the "Aiming Point".

Assume again a point  $B$  (Battery Commander) from which  $G$  and  $T$  are both visible and such that  $BG$  is easily measured. ( $BG$  will usually be chosen not more than a few hundred yards in length).

Next, a point  $P$  is selected, the so-called *Aiming Point*, which must be clearly visible from  $G$  and from  $B$ . ( $P$  is usually chosen as distant as possible from  $B$  and  $G$  consistent with visibility;  $GP$  and  $BP$  will therefore measure up to several thousand yards).

Since all lengths which we shall use may be assumed known, our

problem will consist in determining certain angles. The idea is to have the gun first aimed in the direction  $GP$ , that is, as if the (visible) aiming



point were the target, and then to swing the gun through the angle  $PGT$ , where the angle  $PGT = d$  is the quantity which is to be determined from the known data. (See Fig. 6).

*Definition:* The angle  $PGT = d$  is called the angle of deflection. It is announced in mils, at least in the Field Artillery.

The deflection is a fundamental quantity in artillery work, and its determination one of the most important mathematical problems in Field Artillery Service.

In Field Artillery, the deflection is the angle  $PGT$  measured counter clockwise. The angle  $PBT = A$  is likewise measured counter clockwise. Both angles are measured from 0 mils to 6400 mils. The (small) angles  $GTB = T$  and  $GPB = P$  are the "offset angles" or the "offsets," and are counted positive.

The figures of p. 25 will illustrate the manner of measuring the angles.

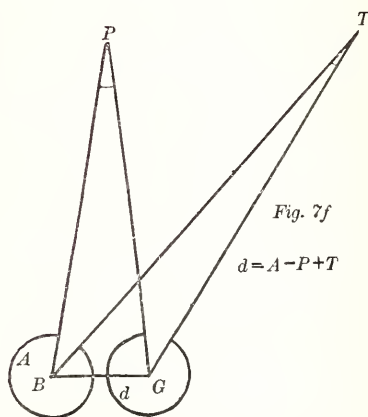
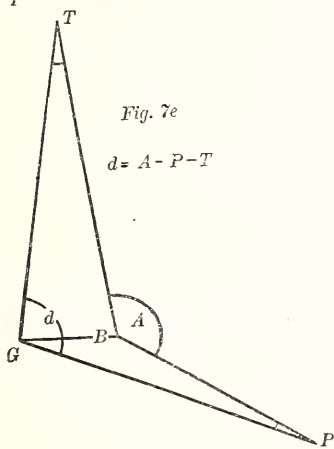
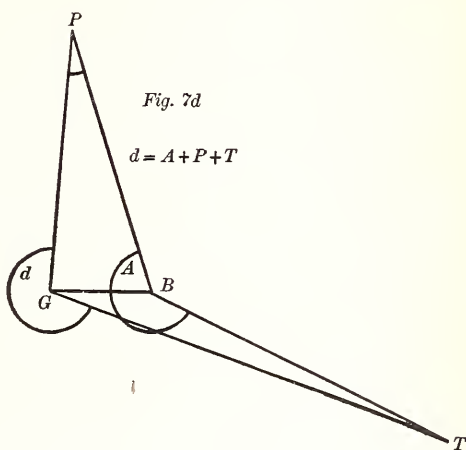
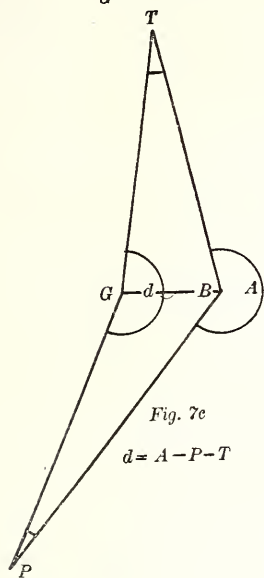
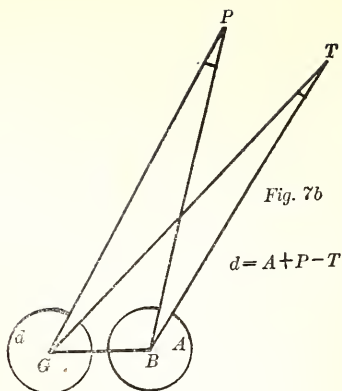
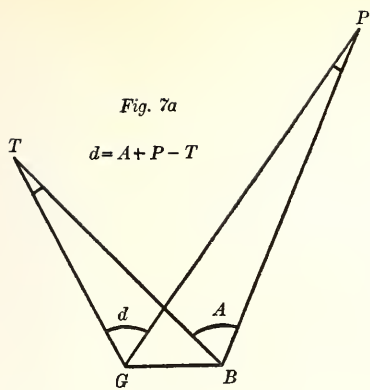
In each case the equation printed with the figure is read off without any difficulty. For example, in 7a,  $A + P = d + T$ ; in 7c,  $(360^\circ - A) + d + T + P = 360^\circ$ ; in 7f,  $(360^\circ - d) + T = (360^\circ - A) + P$ .

*Rule:* One obtains, for all positions of  $G$  and  $T$ , a relation of the type

$$d = A \pm P \pm T,$$

*however B and P  
are chosen*

and each of the four possible combinations of signs actually can occur, as our figures show. Many rules exist to decide quickly which combination must be chosen in a given case. In a trigonometry course it is sufficient to derive the relation from the figure in any particular problem.



## DETERMINATION OF THE DEFLECTION.

*Accurate Solution:* Since  $A$  is given by measurement, the determination of  $d$  depends on finding the offsets  $P$  and  $T$ .

In  $\triangle PBG$  the angle at  $B$  can always be measured, since by assumption both  $P$  and  $G$  are visible from  $B$ . Since the lengths  $GP$  and  $GB$  may also be assumed known, we find  $P$  from

$$\frac{\sin P}{GB} = \frac{\sin PBG}{GP}.$$

In  $\triangle GBT$  the angle at  $B$  can be measured, and the sides  $GT$  and  $GB$  may be assumed known. Hence

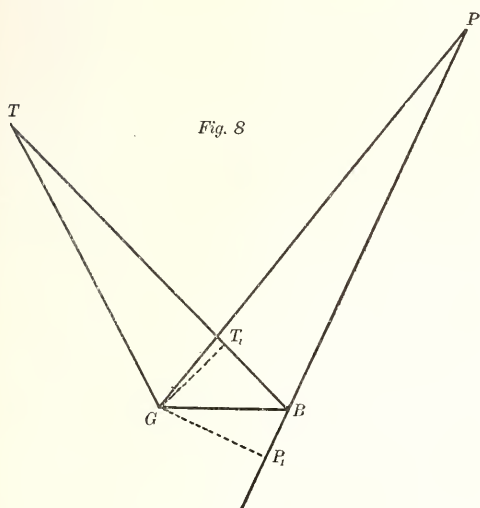
$$\frac{\sin T}{GB} = \frac{\sin TBG}{GT},$$

from which we find  $T$ . (The three angles:  $A$ ,  $TBG$ ,  $PBG$ , are not independent of each other, so that it would really be sufficient to measure  $A$  and one of the other angles. (See problems of p. 28).

In Field Artillery Service, this method is not employed. Instead, there are several methods of approximation in use which are closely related to each other and which are based on the use of parallaxes. We turn to a brief discussion of one of these methods.

## DETERMINATION OF THE DEFLECTION BY MEANS OF PARALLAXES.

The method of parallaxes can, as we know, be applied with advantage only when we have to deal with lengths of which some are many times longer than others. This is one reason why  $B$  is selected close to  $G$ , while  $P$  is selected as distant as possible.



To find  $T$ , assume the perpendicular  $GT_1$  dropped from  $G$  onto  $BT$  (Fig. 8). Then  $GT_1 = GB \cdot \sin GBT$ , where both factors on the right side are known. From  $\triangle TGT_1$  we find  $T$  by the rule of p. 13:

$$T \text{ (in mils)} = GT_1 : \left( \frac{TT_1}{1000} \right)$$

We replace  $TT_1$  (which is not known) by  $GT$ . Since  $GT_1$  is small compared with  $GT$ , the ratio  $GT : T_1T$  is nearly unity, so that the new error thus introduced

is small. Therefore

$$T \text{ (in mils)} = GT_1 : \left( \frac{GT}{1000} \right) .*$$

In practice  $GT_1$  is usually not determined from  $GT_1 = GB \cdot \sin GBT$ , but is estimated by the battery commander at  $B$  from his knowledge of length  $GB$ .

$P$  is found in the same way by estimating the length of the perpendicular  $GP_1$  from  $G$  to  $BP$  and determining  $P$  from the right triangle  $GP_1P$ . Thus

$$P = GP_1 : \left( \frac{GP}{1000} \right) .$$

In most handbooks on Field Artillery the perpendiculars are dropped from  $B$  onto  $GT$ ,  $GP$ . The subsequent work is practically as above. The arrangement in the text is adopted from Professor Whittemore's article.

\*This is exactly the method explained in the second solution of the example of p. 15. When  $GT_1$  is estimated, hardly any computation is required to find  $T$ . But it is important to note that an error of, say,  $s$  per cent in estimating  $GT$  causes an error of  $s$  per cent in  $T$ .

## PROBLEMS

This set consists of a few problems to be solved by applying the theorem of sines, as explained on p. 26. While the accurate method of finding the deflection is not used in the Field Artillery, it may give the student a clearer understanding of the background of the theory of indirect firing.

	1.	2.	3.	4.	5.	6.
$GB =$	500	750	415	70.32	1.087	526.3
$GT =$	1850	1875	1265	95.86	3.256	1938.0
$GP =$	2050	2425	1185	215.70	3.128	1247.0
$A =$	$83^\circ$	$315^\circ 45'$	$232^\circ 25'$	$215^\circ 17'$	$127^\circ 39'$	$325^\circ 26'$
$TBG =$	$40^\circ 20'$	$132^\circ 15'$	$102^\circ 35'$	$143^\circ 23'$	$86^\circ 27'$	$48^\circ 37'$
$d =$	?	?	?	?	?	?
Type:	Fig. 7a. $A+TBG$	Fig. 7b. $A+TBG-360^\circ$	Fig. 7c. $360^\circ-A-TBG$	Fig. 7d. $A-TBG$	Fig. 7e. $360^\circ-A-TBG$	Fig. 7f. $360^\circ-A+TBG$

Since it is necessary to work with the sines of angles in the accurate solution, the angles are given in degrees, because every angle in mils would have to be changed to degrees before tables can be used. Besides, the base  $GB$  has been chosen larger in comparison with the range  $GT$  than is permissible when the method of parallaxes is employed. This was done in order to avoid triangles with one angle nearly zero. The student is advised to construct the figures.

Problems to be solved by the method of parallaxes have not been inserted, because an artillery officer receives in the army a thorough training in the determination of the deflection by methods of approximation.

*Remarks:* It will be noticed that if the battery commander's station ( $B$ ) is chosen as aiming point, that is, if  $B$  and  $P$  coincide, IVb yields IVa as a special case.

It might therefore seem an unnecessary complication to choose a separate aiming point. However, the method of approximation explained above (or similar methods) permit a very rapid calculation of  $P$  and  $T$  within the limits of accuracy required for Field Artillery, so that no appreciable loss of time is involved in choosing for  $B$  and  $P$  distinct points.

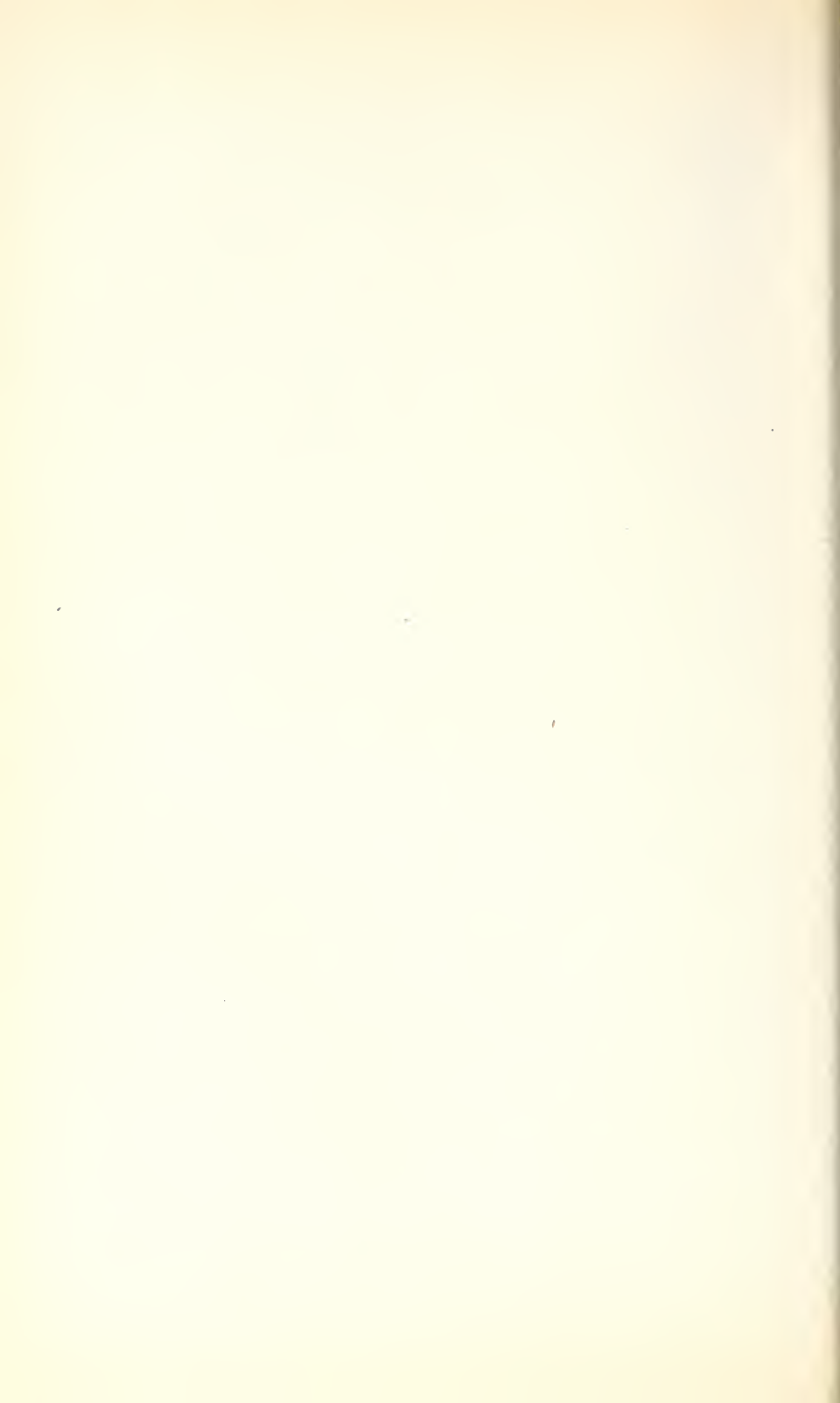
On the other hand, it is desirable to choose the aiming point as distant as possible, while the battery commander's station is generally desired at a moderate distance from the gun. This arrangement is considered best for practical reasons connected with the question of fire control by the battery commander and which arise largely from the fact that the Field Artillery never uses individual guns as a unit, but whole batteries.

In fact, the indirect method of pointing, with a distant aiming point distinct from the battery commander's station, is frequently employed even when the target is visible from the guns, on account of the advantage of centralized fire control.

Correction: p. 24 read Rule:

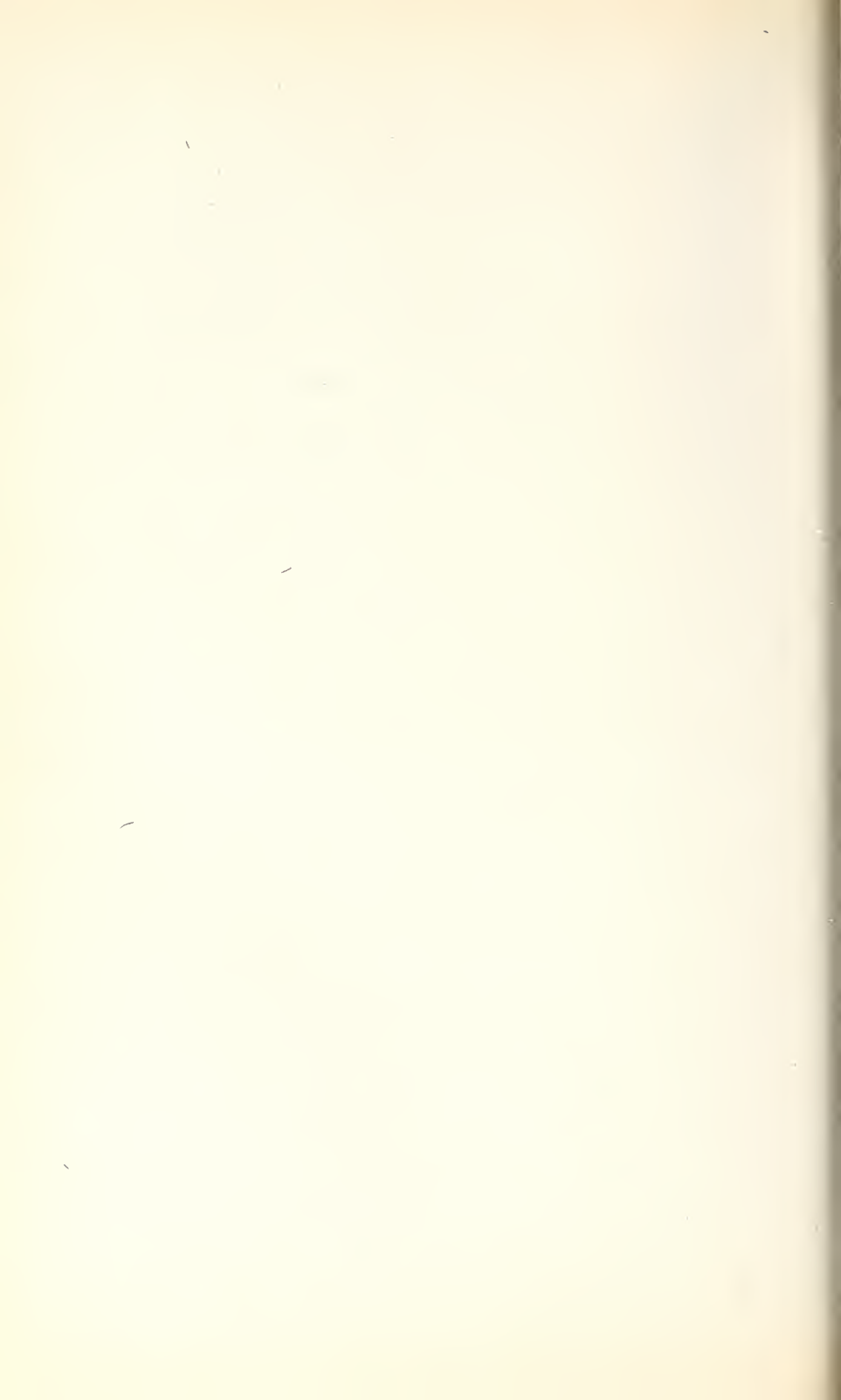
*One obtains, however  $B$  and  $P$  are chosen, a relation of the type*

$$d = A \pm P \pm T.$$













AN OUTLINE  
FOR THE STUDY OF  
ECONOMIC READJUSTMENTS

following

THE WAR OF 1914-18

PREPARED FOR COMMITTEE  
IN CHARGE OF THE COURSE ON WAR ISSUES

in the

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PRICE TWENTY-FIVE CENTS

Published 1919  
by the  
UNIVERSITY OF ILLINOIS PRESS  
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## I. ECONOMIC SYSTEMS

### A. Socialistic Systems

1. **Communism.** All capital owned by the State. Men and women assigned to their daily tasks by committees or rulers, who are elected or who seize the authority by force and hold it by might. The products of capital and labor controlled by authorities and distributed in accordance with the rules of the community organization. Children are the wards of the community. Primitive tribes are often conducted on the communistic basis.
2. **Socialism.** Admits private property in consumption but requires community ownership and operation of the tools of production. This system magnifies the state and minimizes the individual. It stresses justice in distribution more strongly than efficiency in production.

### B. Individualistic Systems

1. **Anarchism.** A system in which the individual is given free play and works out his own economic salvation without government control of any kind.
2. **Private Property Operated under Government Control.** Sometimes called the Capitalistic System.
  - (a) This system is in general use among all civilized nations. It is a combination of communism, socialism, and individualism, each system being adopted in those fields of economic life where experience has demonstrated its peculiar fitness. Some nations are more communistic than others; some more individualistic. Thus, most governments have made the roads common property although they quite generally assess the cost of maintaining the public highways in accordance with certain individualistic norms, such as value of adjacent property, income, or to a certain extent the use of the facilities thus provided. Again some nations are more socialistic than others; some own and operate railways and other public utilities; some own and operate factories and some own and operate, or lease to private operators, mines, lands, forests, and other valuable natural resources.

**C. The Characteristic Features of the Present Economic System**

1. Privately owned property
2. Freedom of association in business enterprises
3. Business enterprises conducted by
  - (a) Individual proprietors
  - (b) Partnerships
  - (c) Corporations
  - (d) Business enterprises, united into associations, trusts, and composite corporations.
4. Individual initiative and individual responsibility in business enterprises.
5. Large and small business enterprises
  - (a) Freely exchanging their products
  - (b) Freely competing for capital, for labor, and for markets.
6. A uniform medium of exchange furnished by the government or controlled by it.
7. A Private Banking System dealing in money and credits.
8. Government control over the various activities of the industrial organization.

**D. International Commercial Policies**

1. As to freedom of trade
  - (a) Free trade countries
  - (b) Restricted trade countries
    1. Tariff for revenue
    2. Tariff for protection
      - a. Agricultural products
      - b. Manufactured products
    3. Preferential tariffs
    4. Export duties
  - (c) Foreign trade encouraged
    1. Bounties and subsidies
  - (d) Commercial treaties
2. International Commerce
  - (a) Economic advantages
    1. Geographical distribution of production

2. Law of comparative costs.

(b) Shipping facilities

1. Ships and ports

2. Sea routes and strategic channels

Influence of distance and dangers of the sea.

b. Strategic channels; e. g., Gibraltar, Dardanelles, Suez canal, Panama canal, Straits Settlement, the Baltic canal, Panama canal, the English Channel.

3. The merchant fleet and the navy

(c) The freedom of the seas

(d) The balance of trade and international payments.

**E. Economic Progress under the Present System**

1. In national wealth

(a) The United States

(b) Great Britain

(c) France

(d) Germany and Austro-Hungary

(e) Italy

(f) Other countries

2. In national income

(a) Countries mentioned above

**F. The Distribution of Wealth under the Present System**

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Hough: Ocean Trade and Traffic

Fisk: International Commercial Policies

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King: The Distribution of Wealth in the United States

Zenker: Anarchism.

## II. IMMEDIATE EFFECTS OF THE WAR ON THE ECONOMIC ORGANIZATION

### A. Mobilization of men

1. Preparation for mobilization
2. The call to arms
  - (a) In European countries
    1. Number and character of men called to arms in the various countries
    2. Dates of mobilization
  - (b) In the United States
    1. The nature of the selective draft system

### B. Mobilization of Capital

1. Kinds of capital mobilized
2. Amount of capital devoted to war purposes
3. Methods of commandeering capital in various countries
4. The creation of new capital for war purposes
5. Economic effects of diverting capital from its normal uses to those of war
6. The speeding up process
  - (a) In the production of food
  - (b) In the production of coal and other fuel
  - (c) In the production of war material
7. Curtailing the production of luxuries and non-essentials
  - (a) By government order
  - (b) By government purchase
  - (c) By appeals to patriotism
  - (d) By withholding labor and capital
8. Limiting the use of luxuries and non-essentials
  - (a) By government order
  - (b) By patriotism

**C. The Industrial Army**

1. **Effect of mobilization on the character of the working population in**
  - (a) Various countries
  - (b) Various industries
  - (c) The work of women, children, and the physically unfit.

**D. The effects of war on the consumption of goods**

- (a) Food
- (b) Equipment for the army
- (c) Clothing for the working classes
- (d) Arms and munitions

**E. Destructive effects of the war**

1. **On men in the army**
  - (a) Men killed; men permanently disabled; men wounded and temporarily disabled
2. **Effect of war in causing labor to be devoted to work less productive than while peace prevailed**
3. **On capital**
  - (a) Destruction of cultivated lands in France, Belgium, Serbia, Roumania, Italy, and Russia
  - (b) Destruction of buildings and machinery
    1. Necessary for the progress of the war
    2. For other than necessary purposes
  - (c) Capital rendered partially or entirely useless during the period of the war.

**F. The Effects of the Mobilization of Men and Capital on the Internal organization of Business Enterprises.**

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### III. THE PROBLEM OF PRICES

#### A. The Functions of Money

1. As a medium of exchange
2. As a standard of values
3. As a standard of deferred payments

#### B. The Effect of the War on the Output of Gold

#### C. The International Flow of Gold during the war—policies and practices of various nations.

#### D. Credit in war time

1. Issue of paper money based on a reserve of gold
2. The gold reserve in war
  - (a) The proclamation of Sept. 7, 1917
3. The issue of paper money by various governments
4. The use of Federal Reserve Notes

#### E. The price level

1. Before the war
2. Effect of war on the price level
  - (a) In various countries
  - (b) In various industries

#### F. The Effect of the war on

1. The cost of living
2. The rate of wages

#### G. The Problem of Price Adjustment

1. To what extent will prices fall
2. The contraction of credit

3. The effect of high prices on the production of gold—proposals for encouraging the production of gold by government subsidies
4. The international flow of gold after the war
5. The proposal for an international clearing house for international payments
6. The release of war goods for peace purposes
7. The resumption of normal production
  - (a) The industries
  - (b) The crops
8. Effect of falling prices on
  - (a) business activity
  - (b) the employment of labor

#### H. Government work on roads and buildings

#### I. The Proposal for a Tabular Standard of Prices

1. Jevon's Plan, 1877
2. Fisher's Plan, 1912

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#### IV. THE GOVERNMENT AND THE PROBLEMS OF ECONOMIC READJUSTMENT

##### A. The control of food

1. Act of August 10, 1917; establishment of the Food Administration
2. Organization of the Food Administration
3. The Food Licensing order of October 8, 1917, and amendments

##### B. The control of coal

1. Act of August 10, 1917
2. The Fuel Administration—created by executive order of August 23, 1917
3. The work of the Fuel Administration
  - (a) Contracts for sale of coal and coke, Dec. 24, 1917, regulated.
  - (b) The license system of March 15, 1918
4. Limitation of non-war industries through the Fuel Administration

##### C. Control of shipping

1. Act of May 12, 1917, concerning enemy ships
2. Foreign ships in Port; Espionage Act
3. Exportation of Arms and munitions
4. Control of other exports
  - (a) Act of August 10, 1917
  - (b) Proclamation of February 14, 1918

##### D. Trading with enemy

1. Act of October 6, 1917

##### E. War Insurance

1. Act of Oct. 2, 1914, as amended Aug. 11, 1916, June 12, 1917, and

Oct. 6, 1917, in re Marine Insurance, Seamen's Insurance, and Military and Naval Insurance

**F. Control of railway transportation**

1. **Priorities Act of August 10, 1917**
2. **Control Act, May 21, 1918**
3. **Proclamation taking over Railways, December 26, 1917**
4. **The Government administration of the Railways**
  - (a) The administration
  - (b) The contracts with the Railways.
  - (c) The future of the Railways

**G. The control of telegraph, telephones, and cables**

**H. Control of Financial operations**

1. **War Finance Corporation Act of April 5, 1918**
2. **The loaning of capital**
3. **The control of new and refunding issues**

**I. Government Reorganization for war purposes**

1. **The Overman Act of May 20, 1918**

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Report of the Bureau of Foreign and Domestic Commerce on Economic Reconstruction. Misc. Series No. 73.

## V. SHIPPING AND FOREIGN TRADE

- A. The world's merchant fleet before the war
- B. The destruction of shipping during the war
- C. The use of many ships for war purposes
- D. The transfer of enemy ships to the allied nations
- E. The taking over of Dutch ships by the United States; proclamation of March 20, 1918.
- F. The transfer of many lake ships and ships used in coastwise traffic to the transatlantic route
- G. The building of new ships
  - 1. Privately built ships in various countries
  - 2. The emergency fleet corporation
- H. The world's merchant fleet after the war
- I. Ship building vs. shipping policy of the United States
  - 1. American Registry Laws
  - 2. Panama Canal Act of 1912, as amended August 18, 1914. Its use in war by order of May 23, 1917.
- J. The Seamen's Act
- K. Shipping Subsidies
- L. The merchant fleet and the navy
- M. Government Insurance of War Risks
- N. Arguments for and against Government ownership of merchant vessels
- O. Agreements between steamship companies
- P. Freight Rates
  - 1. Before the war
  - 2. During the war

3. After the war

Q. Terminal Facilities

1. New York-San Francisco, and other cities

R. Proclamation concerning exports, February 14, 1918

S. Statistics of international trade during and following the war

T. Trade acceptances and their use

U. Post-war international trade as affected by

1. The return of American securities

2. Loans to foreign countries

V. Settlements for the balance of trade

W. Combinations for Export Trade

1. The Webb Law of April 10, 1918

References: Hough: Ocean Trade and Traffic  
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Statutes and Executive Proclamations  
Reports of the Emergency Fleet Corporation  
Reports of the Bureau of Domestic and Foreign Commerce  
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## VI. WAR DEBTS AND WAR FINANCE

- A. Debts of the nations before the war
- B. The costs of the war
  - 1. Costs in destruction of property and the loss of life
  - 2. Cost in war debts
- C. Raising funds for the war by taxation
  - 1. The Constitutional Amendment of 1913 relating to the Income Tax.
  - 2. The Revenue Act of October 3, 1917
    - (a) Kinds of taxes provided for.
    - (b) Proceeds of the Tax.
  - 3. The Revenue Act of February, 1919
- D. Taxation in England, France, and Germany.
- E. Raising Funds for the War by loans—the United States
  - 1. The First Liberty Loan, June 15, 1917
  - 2. The Second Liberty Loan, November 15, 1917
  - 3. The Third Liberty Loan, May 9, 1918
  - 4. The Fourth Liberty Loan, October 20, 1918
  - 5. The Victory Loan of April, 1919
- F. The use of Loans in England, France, Germany, etc.
- G. Principles governing the use of taxes and loans
- H. Characteristics of the policy adopted by the United States
  - 1. Extensive use of income taxes—heavy progressive super tax rates with the exemption materially reduced
  - 2. Use of excess profits tax.
  - 3. Extension of consumption taxes—but used to less extent than

in former emergency measures—attempt to place tax on luxuries, e. g., amusements, lodge initiations, etc.

4. Discussion of constitutional amendment for federal land and property taxes. Signing of the armistice removed the immediate need for increased revenue.
  5. Treasury notes used extensively in anticipating the returns from liberty loans
  6. Bank credit greatly expanded—large use of the Federal Reserve notes
  7. Use of War Savings Certificates and bonds of small denominations—an appeal to persons of small means
  8. Noticeable attempt to place burden according to ability to bear it
  9. Percentage of expenditure raised thru taxes comparatively large
- I. Organization for the collection of taxes and the placing of bonds
1. The work of the Department of Internal Revenue
  2. The organization of the several liberty loan committees
  3. The work of the Federal Reserve System in placing the loans
- J. International loans
1. By the United States
  2. By England and others
- K. Effects on the War debts on industry and finance
1. Effect on tax policy
  2. Effect on international trade
  3. Effect on business activity
- L. War Indemnities
1. War indemnities in the past
  2. Determination of kinds and amounts
  3. Effect of indemnities on international trade

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National City Bank: Internal War Loans of Belligerent Countries.  
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## VII. LABOR PROBLEMS OF THE READJUSTMENT PERIOD

### A. The genesis and development of labor problems

1. The evolution of modern industrial society
2. Labor and production
3. Labor and distribution
4. Analysis of the labor problem

### B. Recent tendencies in the labor problem

#### 1. Conditions incident to the war

- (a) Temporary conditions: Dislocation of the labor supply, labor shortage, breaking down of labor safeguards, acute industrial unrest, etc.
- (b) Permanent results of the war: Greater solidarity of the ranks of labor, development of the idea of industrial democracy, greater demands of labor for a larger share of the differential, international cooperation between labor forces.

#### 2. Labor problems of the reconstruction period

- (a) Redistribution of the labor supply highly concentrated in war industries.
- (b) Unemployment due to the demobilization of the military and naval forces and the slowing up of industry.
- (c) Industrial unrest accentuated by the lack of employment, the continuation of high prices, and the insistence of labor unions for better standards of pay, hours and conditions of work.
- (d) The child labor problem
- (e) The woman labor problem
- (f) Autocratic control of industry
- (g) The training of skilled labor, in which we were found wanting during the war period
- (h) The adjustment of wages to the price level



- (i) The spread of Bolshevism and other forms of radicalism
- (j) The immigration problem

### C. Suggested remedies

1. **Extensive public works**—by federal, state, and local governments to furnish employment during the readjustment period
2. **Land grants** to returning soldiers and sailors
3. **Exclusion of immigrants** until the readjustment of our industries has been effected and the domestic labor supply has been absorbed
4. **Retention of the present high wage levels**, at least until the level of prices falls
5. **The introduction of more democratic control of industry** in order to establish industrial peace
6. **Forceful suppression of Bolshevism and other forms of radicalism**
7. **Continuation of coordinated war labor administration** to aid in the settlement of industrial disputes
8. **Extension of the United States Employment Service** to connect the sources of supply and demand for labor
9. **Establishment of state and federal bureaus of industrial research** to aid in the scientific adjustment of the several problems involving labor in industry
10. **The organization of a national labor party** to cooperate with state labor parties—when organized—to advance the interest of labor during the reconstruction period and after
11. **Reduction of the hours of employment**

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## VIII. THE ROLE OF CAPITAL

### A. Nature and Function of Capital

1. The importance of capital
2. The creation of capital
3. Varieties of capital
  - (a) Land and buildings.
  - (b) Roads and vehicles.
  - (c) Machinery and tools.
  - (d) Live stock.
  - (e) Crops, materials, finished goods, money.
4. The uses of capital
  - (a) Capital as an aid in production.
  - (b) Capital as an instrument in war.
5. The formation, structure, and operation of business enterprises
  - (a) Independent business ventures.
  - (b) Cooperating business ventures.
    1. Cooperation in peace.
    2. Cooperation in war.

### B. The adaptation of existing business enterprises to war work

1. Voluntary transition from peace work to war work
2. Transition under the direction of the Government
3. Illustrations of transition in
  - (a) The steel industry.
  - (b) The motor vehicle industry.
  - (c) The chemical industry.
  - (d) Other industries.

### C. The creation of new business enterprises for war work

1. Provision for new capital
  - (a) by private owners
  - (b) through the war Finance corporation
  - (c) by direct Government action.

#### D. The Interest Rate

1. Before, during, and after the war.
2. Effect of a changing interest rate on the formation and operation of new business Enterprises.

#### E. Problems of Capital during and after the War

1. Problems of business management in view of an increasing price level
2. The increase in the cost of production
  - (a) Costs of materials
  - (b) Costs of labor
3. War conditions and efficiency
  - (a) Scientific study of costs
  - (b) Use of the Taylor system
  - (c) The stimulation of shop efficiency by bonuses and other direct methods
  - (d) Some results of capitalistic efficiency
4. The return to normal activities in various lines
5. The cancellation of war contracts
6. Changes in the organization incident to return of the soldiers and the munition workers

#### F. The Farm problem after the war

#### G. The Reward of the capitalist employer

1. The nature of the capitalist's profits
2. Profits as affected by war and the return of peace
3. The excess profits tax
4. Present position of the entrepreneur

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————— of the Federal Trade Commission.  
————— of the War Finance Corporation.  
————— of the Capital Issues Committee.

## IX. POST WAR RELATIONSHIP OF LABOR AND CAPITAL

### A. Relationship during the war

1. The response of labor to the demands of war
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  - (b) In France
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### C. The National Employment Service

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### D. The Soldier and the Land

1. The English program

2. **Secretary Lane's proposal, as outlined in**
  - (a) Letter to Hon. H. I. Osborne, Cong. Record, Nov. 12, 1918, p. 12638
  - (b) Annual Report for 1918

**E. The Housing Problem**

1. **The housing problem in England, during and following the war**
2. **The housing problem in the United States**
  - (1) **Provision by employers**
  - (2) **Housing of the Emergency Fleet Corporation workers**

**F. The Workers' Representation in Industrial Management**

1. **The program of the British labor party as to wages and representation**
2. **The War aims memorandum of the Inter-Allied Labor and Socialist Conference, London, February 23, 1918, as to wages and participation in management**
3. **The Program of the American Federation of Labor**
  - (a) **as to free transportation**
  - (b) **as to employment**
  - (c) **as to representation**
4. **The English program as outlined in the Whitley Reports of March 8, 1917, October 18, 1917, June 31, 1918, and July 12, 1918**
5. **The Rockefeller plan for representation**
  - (a) **The Colorado Fuel and Iron Co. system**
  - (b) **The Atlantic City Conference platform of December 5, 1918.**

**G. Plans of the Federal and State Governments for the adjustment of economic relationship between owners and workers**

**H. To what extent ought workers to be partakers of risk and participants in profits?**

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## X. PLANS FOR SOCIAL BETTERMENT

- A. Safety first movement
- B. Welfare work
- C. Vocational Education and Rehabilitation
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- D. Social Insurance
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2. The economic use of food and clothing
3. Waste in the use of drugs, narcotics, and stimulants
4. Prevention of waste in producers' capital through wise investment and through the work of the Capital Issues Committee

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## XI. THE PROGRAM OF THE SOCIALISTS AND THE ANARCHISTS

### A. The Socialists' Conception of the Present Economic System

### B. The Socialists' plan for Reorganization

1. The evolutionary socialists propose that capitalistic enterprises be gradually absorbed by the state, by the purchase of railways, telegraphs, mines, and later factories and stores.
2. The revolutionary socialists propose to seize all privately owned property in the name of the government and operate it for the benefit of all.

### C. The plans of the British labor party as to private property

1. As to ownership
2. As to operation
3. Their reasons for their program

### D. The plans of the Inter-Allied Labor and Socialist Conference—held in London February 23, 1918

### E. Bolshevism in theory and practise

1. The principles of Bolshevism
2. The Bolshevist organization
3. Their method of procedure
4. The Bolshevist propaganda
5. The results of Bolshevism
  - (a) on the distribution of wealth
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  - (c) on the future welfare of the race

### F. Merits and demerits of socialism

### G. Socialism vs. private ownership under government control

### H. The way of the anarchist

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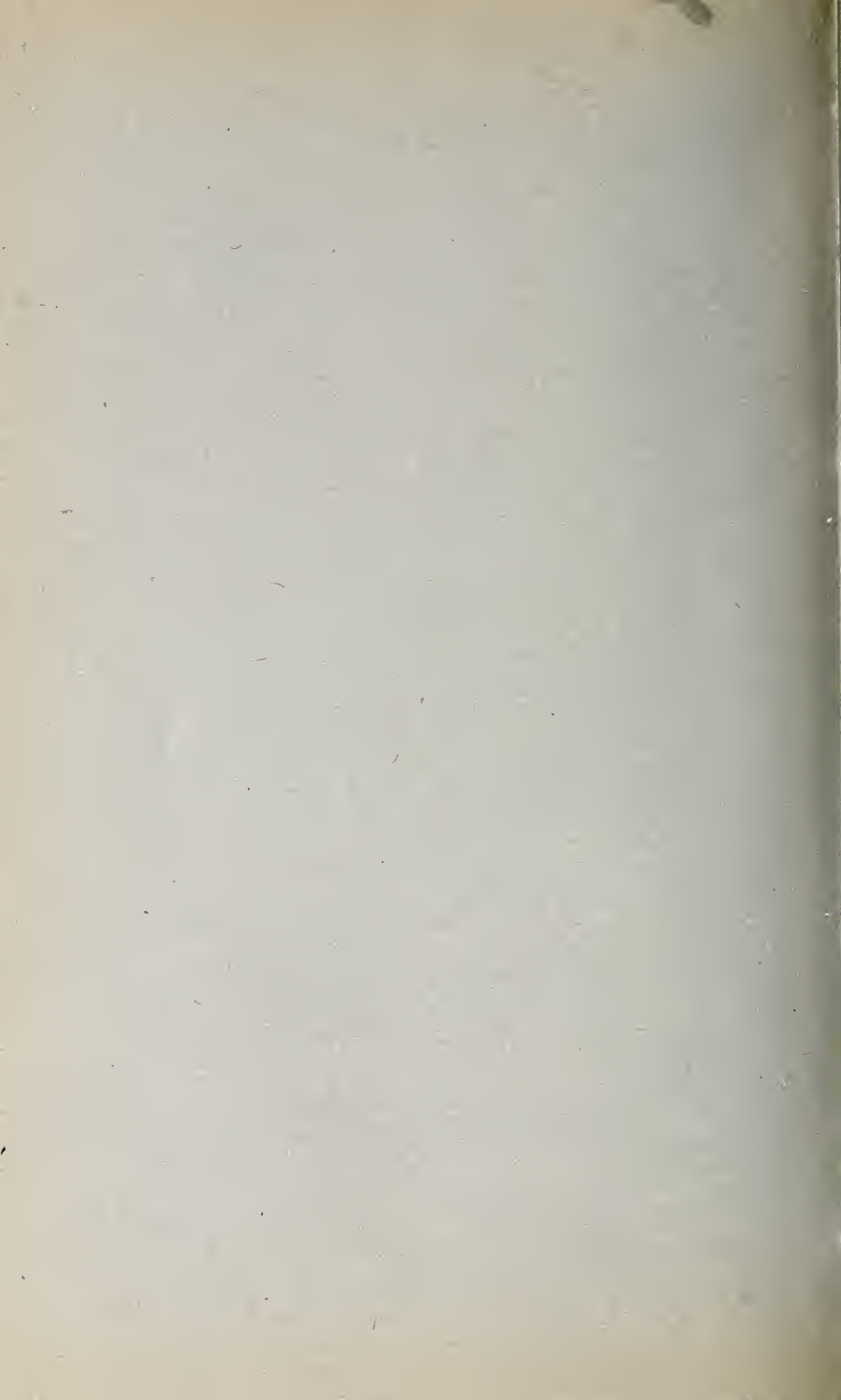














# AN OUTLINE

FOR THE  
STUDY OF THE

## POLITICAL AND SOCIAL INSTITUTIONS

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UNITED STATES, GREAT BRITAIN,  
FRANCE, AND GERMANY

WITH PARTICULAR REFERENCE TO THEIR BEARING UPON  
CAUSES AND ISSUES OF THE WAR

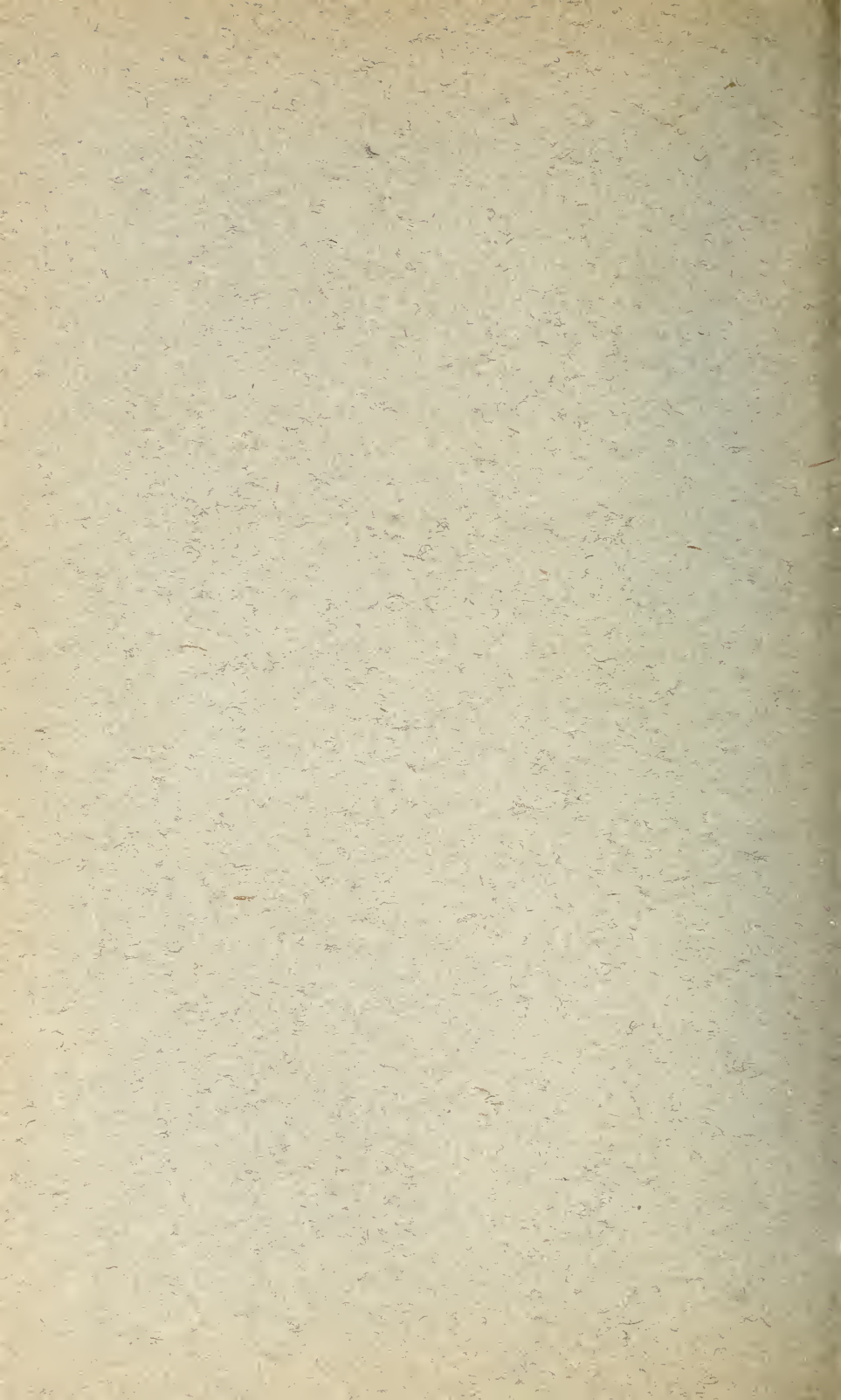
Prepared for the Committee  
in Charge of the Course in War Issues  
IN THE UNIVERSITY OF ILLINOIS

by

JAMES W. GARNER

PRICE TWENTY-FIVE CENTS

PUBLISHED, 1919, BY THE  
UNIVERSITY OF ILLINOIS PRESS  
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## I. FUNDAMENTAL THEORIES

### A. In Respect to the Nature and Function of the State

1. **Prussian Theory.** The State is an abstract mystical entity, a spiritual collective personality having a life of its own apart from and above that of the people who compose it. It is not an artificial creation of man; it is an organism, the result of unconscious evolution; it is an end rather than a means; the individual exists for it, rather than it for the individual; there is a certain quasi divinity about it; its chief attribute is power and power is the measure of right; it is omnipotent and omnipresent. The State may regulate the life of the individual in all his daily concerns; it alone should educate him; it is a better judge of what is good for the people than they themselves are. (Kant, Hegel, Fichte, Nietzsche, Treitschke). Note that German civilization is regarded by Germans as the product of the State rather than of individual effort and enterprise.

- Corollaries:** (1) There are no limits to the authority of the State; its commands cannot be questioned; it is impiety to attack its authority; blind and unthinking obedience is the duty of the citizen.
- (2) The State has ends and interests distinct from those of its subjects.
  - (3) The first duty of the State is to make itself strong and powerful; it must unceasingly strive for power (Nietzsche); it must be self assertive, aggressive, imperialistic; the State with a superior civilization has a right and a duty to impose its civilization upon those less favorably endowed; it must therefore be militaristic. ("The two functions of the State are to administer justice and assert its power without"; "the second important function of the State is warfare"; "war is an institution ordained of God"—Treitschke).
  - (4) The right of small States to an independent existence need not be respected by powerful States ("Small states are ridiculous"; "they are incapable of defending themselves against external attack"; "they do not produce true patriotism or national pride and they are generally incapable of culture in great dimensions."—Treitschke.)
  - (5) The State is not bound by the law of nations or the moral law ("There is no such thing as international law"; "treaties are voluntary self-limitations, binding only so long as it suits the contracting parties to observe them"; "international arbitration is incompatible with the nature of the State; besides, it is a matter of honor for a state to settle its disputes by itself"—Treitschke).

**Query.** Was this theory of the State in any way responsible for the late war? Name some instances in which it was applied in practice.

2. **American Theory.** The state has no existence apart from the people who compose it; it has no ends or interests distinct from theirs; it is not a super-personal, super-moral mystical personality. It is the organization of the people for certain common purposes. It is an instrumentality, an agency created by themselves and the form of which they may alter at will; it is a means, not an end; it exists for the individuals who compose it, not they for it; it is entitled to obedience and in some cases of sacrifice but blind worship of the State as though it were a quasi divinity is not a part of American political philosophy. It allows the largest degree of individual freedom consistent with the rights of all; no industries are monopolized by the State but all are left open to individual enterprise; the life of the individual is not over-regulated; he is not over-governed. Paternalism has no place in American theory or practice. Nor is the United States a militaristic State. War is not considered as a "biological necessity"; the principle of international arbitration has made great progress (over 80 controversies settled by arbitration since 1790); international engagements are regarded as perpetually binding; the rights of small States are considered as entitled to the same respect as those of large States. The power of the State is not regarded as absolute; it is limited by the moral law and the law of nations.

#### B. In Respect to Government

1. **Prussian Theory.** Government exists for the people but cannot be administered by the people. It is a difficult art and requires special training. Government in Prussia is therefore government by trained experts. It is a bureaucracy. Administrative offices are open only to those who follow prescribed courses of study and pass state examinations. It is not responsible to the people; they have little share in it; and there is no popular control over it. The Prussian conception of democracy does not embrace the idea of self government. But the Prussian system has a deserved reputation for efficiency.

**Query.** To what extent should efficiency be regarded as the test of a good government? Is it the sole test?

2. **American Theory.** All governments derive their just powers from the consent of the governed. The people have a right to determine for themselves the form of government under which they live; to choose their public officials; to exercise control over them; and to determine the functions which the government shall exercise. The people are their own masters; public officers are public servants. Efficiency is not regarded as the sole test of good government. Stimulation of interest in public affairs, and the political education of the citizens, which result from their participation in government

outweigh the advantages of efficiency which are claimed for the bureaucratic system. In short democracy serves as a training school for citizenship.

**Queries:** Are democracy and efficiency in government necessarily incompatible? What conditions and limitations are essential to the success of democratic government? How does the German conception of democracy differ from the American conception? Dangers of democracy: ignorance, indifference, demagogy. (Compare Bolshevism: government by a single class—the proletariat.)

### C. In Respect to Constitutional Safeguards

1. **What is Constitutional Government?** It is government organized and conducted in accordance with certain fundamental rules, either conventional or customary, which are binding upon those who exercise authority. It is therefore a government of "laws and not of men".
2. **How Framed.** In the United States constitutions are framed by popularly elected conventions and are generally submitted to the voters for their approval or disapproval. Compare the German state constitutions which were "promulgated" by kings and princes and which may be abrogated by them. What is the American view of such a constitution?
3. **How amended.** In the United States the state constitutions are amended by the action of the voters (upon proposal by the legislature or by popular initiative). In England, Germany and France the constitutions may be amended by the Parliaments. No distinction is made between the constituent and the legislative powers. Note that in Germany 14 negative votes in the **Bundesrath** may defeat an amendment and that the Emperor controlled 21 votes in that body.
4. **Character.** A distinguishing characteristic of American constitutions is that they are not only instruments for the granting of powers but are also instruments of limitations and prohibitions. Compare the English constitution which sets no limits to the power of Parliament; also the French and German constitutions which contain few or no express limitations on the powers of Parliament.
5. **Supremacy of the Constitution over Ordinary law.** In the United States the courts have the power to maintain the supremacy of the constitution by refusing to enforce a statute which is contrary to the constitution. In England, France, Germany and most of the other countries of Europe, the courts have no such power. If therefore the legislature in those countries passes a law in contravention of the constitution the law is nevertheless valid and there is no judicial recourse against its enforcement.

### D. In Respect to Liberty.

1. **Constitutional Protections.** The American constitutions are not only instruments of government but also charters of liberty (First eight

amendments to the Federal constitution; bills of rights of the state constitutions). Compare the constitutions of the German Empire and of France. Nevertheless the French regard the Declaration of the Rights of Man and of the Citizen of 1789 as a part of their public law. The Prussian constitution contains an elaborate bill of rights but most of its provisions are "empty phrases". Note the power of the American courts to enforce the provisions of the bills of rights and to protect the domain of liberty which they create.

2. **Conceptions of Liberty.** In the United States, England and France, liberty of speech, press, assembly, religion and education is subject to few restrictions, except in time of war. In Germany no public meetings may be held without a declaration to the police. Speeches must be delivered in the German language, even in Poland and Alsace-Lorraine. Editors are jailed for criticizing the government and private schools are only tolerated. During the existence of the Anti-Socialist law, (1878-90), 1000 books and pamphlets, over 80 German newspapers and 60 foreign journals were placed on the index, and 1500 persons were imprisoned. Compare the following from Prof. Hintze of the University of Berlin: The government of Prussia is a "form of government which does not seek primarily the comfort and happiness of the individual but rather the power and greatness of the State, since without the latter, general prosperity cannot be regarded as secure." "German freedom," says Prof. Troeltsch, "will never be purely political; it will always be bound up with the idealistic thought of duty and with the romantic thought of individuality."

**Queries:** What is meant by "political" liberty? What effect has the denial of liberty upon the character of the people?

Name some restrictions placed upon the liberty of American citizens during the late war.

**Required reading:**

Beard and Ogg: National Governments and the World War, Chs. 1, 10.

Lowell: Greater European Governments, pp. 3-4; 98-104.



## II. FORMS AND FUNCTIONS OF GOVERNMENT

1. **Monarchy.** Great Britain is a monarchy and so was Germany until recently, i.e., States whose titular heads ruled by hereditary right. Is monarchy necessarily incompatible with popular government? Is the English government a government by the people? Note that Belgium is a monarchy but its constitution declares that "all powers emanate from the people". But compare the German monarchies. (In 1905 the people of Norway voted to establish a monarchy in preference to a republic.)
2. **Republic.** The United States and France are republics. Their executive heads are presidents elected for definite terms. Is the government of England less republican in spirit?
3. **Federal Government.** A composite type under which there is a common central government and a number of component member-states each with a large degree of local autonomy (the United States, the German Empire, Switzerland, Brazil, Canada, Australia).

### A. American and German types compared:

- (a) In the United States the member-states are on a footing of equality in respect to rights and privileges; in Germany they are unequal.
- (b) In respect to the distribution of powers the American states are left in control of many matters which in Germany are conferred upon the Imperial Government.

**Query:** Is the present distribution of powers between the national and state governments in the United States in harmony with modern conditions?

- (c) A distinguishing feature of the German federal system is that it is a system of centralization in legislation and decentralization in administration (the state governments execute in the main the laws of the Empire).
- (d) In the United States the Supreme Court is the umpire which determines disputes between the national government and the states and keeps each within its own sphere. The national government cannot directly coerce a state. In Germany the Imperial government may, thru the process of "federal execution", compel a state to perform its obligations as a member of the Union.

### B. Merits of Federal Government.

- (a) The only form which combines the advantages of a central government for the management of common affairs, with the advantages

of local government for the administration of local concerns. It allows uniform regulation where uniformity is essential and at the same time permits diversity where local conditions make it desirable.

- (b) It is well adapted to large states composed of diverse nationalities or of populations with widely varying interests and standards of right and wrong.

**Queries:** Would any other form of government be so well suited to the conditions prevailing in the United States? Would it not be well adapted to the British Empire? Instead of dividing Austria into a number of petty states would the interests of the various nationalities in that country be better subserved by federation, leaving to each a wide degree of local autonomy or by making them independent?

### C. Weaknesses of Federal Government

- (a) In respect to national defense and the performance of international obligations.
- (b) Danger from diversity of law where there should be uniformity (law of insurance, bills and notes, marriage and divorce, etc.)
- (c) Danger of conflicts between the central and local governments.
- (d) Complexity, delay and expense resulting from a dual system of legislation and administration.

4. **Unitary or Centralized government.** A system in which the powers of government are not distributed between a central government and a number of local governments but are concentrated in a single central government. The government of France is a good example. The local governments are under the control of the central government. What are the merits and demerits of such a system?

### 5. Parliamentary Government

A. **Definition:** A system in which the executive and legislative functions are not separated. The titular executive is an irresponsible hereditary monarch or a president, the real executive being a ministry or cabinet which is usually a committee of the legislature. The ministry formulates all important legislation, steers it through the legislature and then carries it into execution. It is immediately responsible to the legislature and mediately to the people for its political policies and must resign when it ceases to have the confidence of either. (England, France and most of the countries of Europe).

B. **Working in England and France.** The parliamentary system has not worked as smoothly in France as in England because:

- (a) It is not indigenous.
- (b) The ministers are subjected to excessive control by the legislature.

(c) The right of interpellation is abused.

(d) There is a multiplicity of political parties.

C. **The German System.** In Germany the true parliamentary system has not heretofore existed, because the ministers are not members of the legislature nor are they responsible to it. They were appointed by the Emperor and were responsible to him alone. (Compare the Saverne case).

D. **Merits of the Parliamentary System.** The legislature and executive work in harmony. The same body which formulates legislative policies carries them into execution. By means of the power of dissolution an appeal may be taken at any time to the electorate to determine conflicts between the executive and the legislature. Is the English government more responsive to public opinion than that of the United States, as is sometimes asserted?

E. **Demerits.** Instability; lack of concentration of power.

6. **Presidential Government:** (the United States). A system in which the executive and legislative functions are in the main kept separate. The executive is independent of the legislature both as to tenure and political policies, being responsible to it only for criminal acts. Members of the cabinet are not members of the legislature; they do not necessarily belong to the party in control of the legislature; they are appointed by the executive and are responsible to him alone.

**Queries:** Should members of the cabinet be allowed seats in Congress even if not responsible to it? Why was the Parliamentary system not introduced into the United States?

7. **Functions of Government:**

A. **The Paternalistic Theory:** the government is a better judge of what the common welfare requires than the people are; the government should guide and direct them; regulate their daily lives; watch over them; and provide for the satisfaction of all their common needs. (Example: Prussia, to a large extent). What is the effect of such a system of government on the character of the people?

B. **The Socialistic Theory.** The State should in addition to its functions of police and defense engage in various industrial undertakings (such as the operation of railroads, telegraphs and the like), promote the social and economic interests of the people, provide them with free education and even amusement, insure them against old age and sickness, lend money to farmers, etc. The German governments and especially that of Prussia own the railroads, canals, telegraphs, telephones, mines of various kinds, forests, conduct savings banks, pawn shops, employment agencies, systems of insurance, and have a virtual monopoly of education. The German cities own and operate all public utilities, maintain opera houses, public markets, slaughter houses and even milk depots, lodging houses, restaurants, etc. The governments of England, Australia, New Zealand and other countries

are now engaged in many socialistic undertakings. How does the state socialism of these countries differ from that of Germany? Should a government undertake to perform a service which may be as well done by private enterprise?

- C. **The Individualistic Theory:** The government which governs least is the best. The functions of government should be limited to the maintenance of peace, the defense of the country, the enforcement of contracts, and the punishment of crime. Does the American government belong to this class? Is the theory workable under modern conditions?

**Required Reading:** Beard and Ogg, chs. 3, 11, 18. Lowell, pp. 13-28; 93-97; 120-122; 182-183; 233-249; 254-256; 277; 299-301.

### III. THE ELECTORAL FRANCHISE

1. **In the United States.** Excluded classes, lunatics, persons convicted of election offenses and infamous crimes, women in many states. Educational and taxpaying requirements:

(a) In Northern states.

(b) In Southern states. The "grandfather" and "old soldier" devices in certain southern states. Woman suffrage; limited vote in many states, equal suffrage with men in 16 states.

Note that in the United States no distinction is made between national and state suffrage as is made in England between the parliamentary and municipal franchise and in Germany between the Imperial and state suffrage. In the United States there is but one class of voters and their qualifications are fixed by the states subject only to the provisions of the 14th and 15th amendments to the Federal constitution.

2. **In England:** By the Reform Act of July 7, 1918, the parliamentary franchise is conferred on every man over 21 years of age who has resided in the same place for 6 months and on every woman over 30 years of age who had formerly enjoyed the privilege of voting in local elections or who is the wife of an elector, and who occupies a dwelling or premises of the annual value of 5 pounds. (Excluded classes, peers, idiots, lunatics, bankrupts). Note: persons in active military or naval service may vote.

3. **In France.** All male inhabitants over 21 years of age except convicts, bankrupts, persons under guardianship and persons in the active military or naval service are qualified voters. No educational or property qualifications. Women may vote for judges of commercial and industrial courts.

4. **In Germany**

A. **The Imperial Suffrage.** All males who have attained the 25th year of age, except bankrupts, persons under guardianship, beneficiaries of public charity, convicts, and those in active military or naval service are qualified to vote. Women are excluded in all elections.

B. **The Prussian Suffrage.** Members of the Prussian legislature are chosen not directly but by electors who are in turn selected according to a three class system under which the voters are grouped on the basis of the amount of taxes they pay. In 1903 the first class represented 2 percent of the voters, the second class 12.7 percent

and the third, 85 percent. (In 2159 districts in 1911 a single voter constituted the first class.)

5. **Methods of exercising the Franchise.**

- A. In the United States secret ballot, screened voting booths, no other persons except election officers allowed in the voting room, no electioneering within a certain distance of the polling place, laborers allowed to be absent from their employment for the purpose of voting, etc. Substantially the same safeguards in England.
- B. In France the system of envelope voting prevails and in 1914 the secret voting booth was introduced. Elections are held on Sundays for the benefit of the working classes.
- C. In the German Imperial elections voting by envelope prevails but there is no screened voting booth. Voters are therefore exposed to pressure and intimidation.
- D. The Prussian elections are not held on Sundays as in France, and the law does not secure to the working classes a right to absent themselves from their employment for the purpose of voting. Moreover, the ancient system of *viva voce* voting prevails. The intimidation to which the voters are thus exposed deters large numbers from voting. (In 1903, 77 percent of the voters refrained from exercising the franchise in the Prussian elections). Compare the following from Treitschke: "The secret ballot is the shabbiest trick that was ever proposed in the name of liberalism." (Politics II, 199). Note that in Germany a strong and effective pressure is exerted by the government upon the voters, in behalf of the candidates whom it desires to be elected.

**Required Reading:** Beard and Ogg, ch. 7; pp. 226-237; Lowell, pp. 32-34; 283-291.

#### IV. LEGISLATIVE SYSTEMS

1. **Origin of the principle of representation.** Rise of the British Parliament.
2. **The Bicameral System. Upper Chambers.** The House of Lords in England. Origin, composition, and powers. By the Parliament Act of 1911 it lost the power to reject money bills and was left only the power to delay other legislation. Proposed changes in composition of.
3. **The Senate of the United States.** 96 members. Now popularly elected. Term 6 years. Equal representation of the States. Special powers, original purpose and early character. Reason for substitution of popular choice; effect on character of the Senate. Elements of strength and of weakness.
4. **The Senate of France.** 300 members. Chosen for 9 years, by departmental electoral colleges. Senators must be at least 40 years of age. On the whole, a body of able representatives but popularly criticized for its conservatism. Proposed alteration of mode of election. Special powers.
5. **The German Bundesrath.** 61 members. Composed exclusively of members appointed by the executive heads of the several states. Members vote by state delegations and as a unit. They vote according to instructions and uninstructed votes are not counted. It is not therefore a deliberative body. Of the 61 votes the Emperor controlled 21. All important bills originate in the Bundesrath and its ascendancy over the Reichstag in this respect is well established. Compare its powers in this respect with the English House of Lords.
6. **Lower Chambers.** The House of Commons in England, 709 members, is elected for a term of five years by practically universal suffrage (male and female) members being apportioned on the basis of population. (Explain why the recent Parliament served for 8 years—no general election between Dec. 1910 and Dec. 1918). Single-member constituencies (counties, boroughs and Universities). Members not required to be residents of their districts. The ascendancy of the House of Commons in the legislative system is now complete. Note that the House may be dissolved by the Cabinet at any time and new elections held.
7. **The House of Representatives in the United States,** 435 members. Chosen for a term of two years by a suffrage fixed by the states. Members are apportioned among the states decennially by Congress on the basis of population but the districts are formed by the state governments. Single-member districts (occasionally representatives-at-large). Each state at least one member. The house cannot be dissolved. Members required by custom though not by law to be residents of their districts.

8. **The French Chamber of Deputies.** 602 members. Chosen for a term of 4 years, by universal suffrage (exclusive of women) from single-member districts. Recent agitation for substitution of choice by general ticket combined with proportional representation. Special functions. Chamber may be dissolved by the President with the consent of the Senate but the power has fallen into desuetude.
9. **The German Reichstag,** 397 members, is chosen for a term of 5 years by manhood suffrage. Single-member districts. Representation based on population but no reapportionment since 1871. Hence great inequalities as to representation. Country districts greatly over-represented and cities under-represented. The government has refused to make a reapportionment because it would increase the representation of the Social Democratic party. As compared with the **Bundesrath**, the **Reichstag** plays a subordinate role in legislation. No control over Chancellor or other ministers. In case it refuses to pass the budget the government may collect the taxes and make appropriations.
10. **Local Legislatures.** In the United States, both houses of the state legislatures are chosen by direct popular vote. In Prussia the upper chamber of the legislature is aristocratic and appointive. The lower chamber is chosen indirectly by electors according to a three class system of suffrage already described. No reapportionment of seats since 1860. Result: Social Democratic party practically unrepresented. (1903 the two conservative parties with 372,132 votes elected 202 members while the Social Democratic party with 314,149 votes elected none.)
11. **Legislative Procedure.** In the English and French Parliaments all important bills are introduced by the ministers. They are prepared by a skilled parliamentary draftsman. Public bills introduced by private members are rarely passed. Different procedure for passing private bills. Committees play a subordinate role. In England, Parliament cannot increase the budget as presented by the Chancellor of the Exchequer. Contrary practice in France. In the German Parliament most bills originate in the **Bundesrath** and must be returned to it when passed by the **Reichstag**. In the United States committees play an important part. Legislation by Congress is largely legislation by committees. Members unlimited right to introduce bills. Usually no distinction between procedure for passing public and private bills. No budget. Legislature free to increase or reduce government estimates of needed appropriations. The "pork barrel" abuse in the United States and France.
12. **Direct Legislation: The initiative and referendum.** In a good many American states legislative measures may be initiated and adopted by the people without the collaboration of the legislature. This device does not exist in England, France or Germany. Note other new institutional forms of democracy in the United States, such as the recall and the direct primary.

**Required Reading:** Beard and Ogg, Chs. 4, 13; pp. 132-138; 220-226; 237-246. Lowell, pp. 35-61; 104-115; 164-180; 185-194; 251-268.



## V. THE EXECUTIVE

1. **Nature of the Executive power.** Combined with the legislative function in the parliamentary system. Plural executives (Switzerland). Compare the organization of the national executive power in the United States with that of the States; in the former case the power is concentrated in the hands of a single person; in the latter it is split up and parceled out between the governor and other officers. Effect on efficiency and responsibility. Multiplication of boards and commissions in the American states. Executive councils in a few states.
2. **The President of the United States.** Chosen for 4 years indirectly by popular vote. Breakdown of the electoral scheme. Criticism of the present method. Candidates nominated by national conventions. Presidential preference primary laws. Re-eligibility; independent of Congress as to tenure and political policies. The Vice President.
3. **The President of the French Republic.** Chosen for a term of 7 years by the legislature organized as a national assembly. Criticism of the existing method. 1848 elected by universal suffrage. No nominating machinery. Rarely elected to second terms. No Vice President. May parliament compel the resignation of the President (Case of Grevy).
4. **The Crown in England.** Hereditary. Present law of succession. May be altered by Parliament. People through their representatives may determine who shall be their king. King holds his title only by parliamentary will.
5. **The Crown (formerly) in Prussia.** Compare the Prussian law of succession with that of England. Doctrine of divine right. Abandoned in England in the 17th Century.
6. **Powers of the Executive.** The President of the United States.
  - (a) Those conferred by the constitution and the laws.
  - (b) Those derived from custom and usage.
  - (c) Those inherent in the nature of the office.

Powers: (a) as civil executive; (b) as military executive.

His share: (a) in legislation; (b) in the conduct of foreign affairs; (c) appointments and administration; (d) ordinance power.

Woodrow Wilson assigns to the president the triple role of: (a) administrative head of the government; (b) formulator of legislative policies; (c) party leader. Compare his powers with those of the King of England and the President of France.

**Query:** What were some of the extraordinary powers conferred on the President by acts of Congress during the recent war?

7. **Powers of the President of France.** Large powers conferred by the constitution but by reason of the parliamentary system they cannot in fact be exercised by the President. Irresponsibility—The only constitutional power which he is free to exercise is to “preside over national ceremonies”. But a strong personality such as Poincare may exert a potent moral influence on the policy of the ministers. Former agitation by the Radical party in favor of abolition of the office.
8. **Powers of the Crown in England.** The royal prerogative; statutory powers. Note that the royal prerogative has been greatly reduced by parliament and what remains can be taken away at any time. Distinguish between the theoretical and the actual powers of the crown; the latter are exercised through ministers who are responsible to the House of Commons. Irresponsibility of the King. Value of monarchy and why it survives.
9. **Powers of the Former German Emperor.** Extensive powers, both civil and military, conferred by the imperial constitution; other large powers as King of Prussia, including the royal prerogative. He was regarded by German publicists as the fountain and source of all law and authority. The function of Parliament was to furnish the crown with information and advice. In legal theory the legislative power belonged to the King. “There is no will in the State superior to that of the sovereign, and it is from that will that both the constitution and laws draw their binding force.” (Laband, *Staatsrecht des deutschen Reichs*). Since the Parliamentary system does not exist in Germany these powers were in fact exercised by the emperor-king. The ministers were his personal and official agents; they were subject solely to his direction and were responsible to him alone for their official acts and conduct. The Emperor considered himself responsible only to God.
10. **Government in Time of War.** Increase of the executive power, “War Cabinets”, boards and other agencies.

**Required Reading:** Beard and Ogg, Chs. 5, 8; pp. 196-202. Lowell, pp. 5-17; 115-118; 131-135; 269-275; 279-281.

## VI. JUSTICE AND LOCAL GOVERNMENT

### 1. The Judiciary.

- A. In England all judges are appointed for life by the Crown and are irremovable except upon address of Parliament. They are paid high salaries. Number of judges as compared with Germany and France very small. Courts generally held by a single judge. System of circuit judges. 1907 creation of Court of Criminal Appeal. The House of Lords and Judicial Committee of the Privy Council as courts. Jury trial in criminal cases but juries rarely employed in civil cases. Juries never judges of the law. Justice administered rapidly and without technicality. System of common law and equity. No administrative courts as on the continent. Power of the judge to sum up and comment on the evidence.

**Queries:** What is the advantage of the system of circuit judges? Why are juries rarely used in the trial of civil cases in England? What is the objection to making juries judges of the law? Ought the judge be allowed to express an opinion as to the weight of the evidence?

- B. In the United States. Federal judges are appointed by the President with consent of the Senate. Life tenure, but may retire on full salary at 70 years of age. Removable only by impeachment. State judges (except in a few states) are elected by the people for definite terms, ranging from 2 to 21 years. Constitutional protections in behalf of the accused. Jury trial in both criminal and civil cases. (In some states, e.g. Illinois, juries are judges of both the law and the facts.) Judge is little more than a moderator. No power to sum up and comment on the evidence. Emphasize the control which American courts exercise over legislation and administration. Criticism of the administration of justice in the United States: slowness in the selection of juries, wide latitude of appeal, reversals for technicalities and harmless errors.

**Query:** What are the merits and demerits of the method of choosing judges by popular vote?

- C. In France. All judges except those of the commercial and industrial courts are appointed. Popular election tried 1790-1804 but abandoned. Life tenure. Except justices of the peace, colonial judges and judges of the administrative courts, they are irremovable by the government. All courts except those of justices of the peace are held by a bench of judges. (Compare English and American Courts). Criticism: Too many judges (over 6000 in France). Compare the English

judiciary: (Hardly more than 100 judges in England). French judges poorly paid. Jury trial in criminal cases, but not in civil cases. (Seven out of 12 may return a verdict). Criticism of French procedure: secret grilling examination of the accused before indictment by *juge d' instruction*; harassing examination by the judge at the trial; no cross examination by counsel; hearsay evidence admitted; Judges take an active part in the trial (compare American and English practice). Since 1895 provision for reparation in case of conviction of innocent persons (compare England and the United States.)

**Administrative Courts:** Jurisdiction of controversies between individuals and the administrative authorities. Much criticized in England and the United States. French courts no power to adjudge acts of the legislature unconstitutional, but may refuse to enforce illegal executive ordinances.

D. **In Germany.** Uniform system of law, procedure and judicial organization for all the empire. The judicial service is a profession. Admission only after completion of prescribed course of study and a state examination. All judges appointed for life and are irremovable except by the court of which they are members, sitting as a disciplinary tribunal. No transfer except with equal rank and pay. In both Germany and France members of the bar are rarely appointed to high judicial position. (Contrary practice in England and U. S.) As in France the courts are collegial in organization; rarely held by a single judge. Jury trial in criminal cases (8 out of 12 may return a verdict.) As in France there are special administrative, commercial and industrial courts. Different from France, however, the administrative judges are irremovable by the government.

## 2. Local Government.

A. **In the United States** the right of local self-government is regarded as an essential feature of democracy. Counties, cities, villages and townships elect their own officials and determine their own policies. Local officials are rarely appointed by the central government and except in a very few states none of them may be removed by the governor. Nor is the local administration subject to the control of the central government. But the powers of the local government are in general only such as are granted to them by the constitution or by acts of the legislature. (Note that some cities have "home rule" charters).

**Query:** Since many local officials (sheriffs, mayors, health officers and the like) are charged with the enforcement of state laws, should not the governor have the power to direct or even dismiss them?

B. **In England.** The local areas, counties, cities, boroughs, districts and parishes have popularly elected councils which in turn choose most of the local administrative officials. Large powers of self-gov-

ernment have been conferred upon them by acts of Parliament. Some of their activities, however, such as those relating to police, care of the poor, education, public health and the like are subject to a certain control by the central government. Few officials elected by the people; but are chosen by the council.

- C. **In France.** The local areas have popularly elected councils, and mayors of towns and cities are chosen by the municipal councils but their powers are very much limited. Many local officials are appointed by the central government at Paris or its representatives in the locality and many acts of mayors and of city councils require the approval of the central authorities. The control and tutelage exercised by the central authorities over the local governments are a survival of the Napoleonic Empire and have been much criticized in recent years by French writers.
- D. **In Prussia.** The provinces have local assemblies but they are not elected by the people. The assemblies could be dissolved by the Crown and many of their acts required the approval of the Crown or a minister. The circle (Kreise) councils are indirectly chosen under a complicated system which gives the preponderance of power to the large landowners and manufacturers. They are largely under the control of a central official called the **Landrath**. Town and city councils are chosen according to a three-class system of suffrage which keeps the control within the hands of the large tax payers. Mayors are elected by the municipal councils. In none of the local areas have the people any share in the election of administrative officials. Prussian municipal government is government by trained experts; on the whole it has been efficient but it is very undemocratic. Compare the view of Prof. Schmoller of the University of Berlin: "self government means class rule and corruption; democratic government usually brings forth capitalistic, class rule, corruption, buying of votes and an uncertain changeable foreign policy."

**Required Reading:** Beard and Ogg, Ch. 19. Lowell, Ch. 4; pp. 122-130; 135-150; 276.

## VII. GOVERNMENT OF COLONIES AND DEPENDENCIES

1. **The British Empire:** Growth, population, nature and extent of.
  - A. The British Colonies are not tributaries; they make no contributions to the Imperial treasury; they have their own protective tariffs.
  - B. Forms of Colonial Government.
    1. The self governing colonies. Their relation to the Empire.
    2. The Crown Colonies.
    3. India. Recent reforms and proposed reforms.
    4. The protectorates.
    5. The government of Ireland.
  - C. The Problem of Imperial Federation. Note that none of the British Colonies are represented in Parliament. Why? But in 1918 there was a colonial representative in the Cabinet.
2. **American Territories and Dependencies.**
  - A. Policy in respect to the domestic territories. Extension of the constitution and gradual introduction of local self-government. Representation in Congress. Ultimate admission to the Union as states.
  - B. Policy in respect to the insular possessions. Extension of the Constitution.
    1. Military government.
    2. Civil government. Local legislatures; veto power of Congress; governor and principal officers appointed by the President; representation in Congress; inhabitants made citizens of the United States (except Filippinos).
  - C. Results: educational, economic and political.
  - D. American semi-Protectorates: Cuba, Hayti, San Domingo and Panama.
3. **The French Colonial Empire:** (a) in Africa, (b) insular possessions.
  - A. Tunis, Algeria and Madagascar.
  - B. Morocco and the Protectorates.
  - C. The French West Indies.

Note that the French Colonies are represented in Parliament.
4. **The German Colonial Empire.** How acquired, extent, population.
  - A. Extension of the bureaucratic system to the African Colonies. No representation in Parliament. The Kaiser was "protector" of all the

colonies and except as to judicial matters his authority was unlimited.

- B. Loss of the German Colonies during the late War. Problem of their disposition.
- C. Government of Alsace-Lorraine, Poland and Schleswig-Holstein. No liberty of speech or of press. Political policy in respect to Alsace-Lorraine. Compare American treatment of Porto Rico and the Philip-pines; also English policy in respect to non-English races, e.g. in Canada and South Africa. Is the English government of Ireland com-parable in any respect to the German government of Poland?

**Required Reading:** Beard and Ogg, Ch. 16. Lowell, Ch. 5; pp. 295-298.

## VIII. POLITICAL PARTIES AND ISSUES

### 1. In England.

- A. The historical parties of England were the Whigs and Tories. About 1835 the Whigs came to be called Liberals and the name Tory was displaced by the term Conservative. Since that time the control of the government has alternated between the two parties (Liberals in control since 1906). In 1896 a section of the Liberal party refused to follow the majority on the question of home rule for Ireland and formed a party known as the Liberal Unionists. They ultimately joined the Conservatives.
- B. The Liberal party has laid special stress on the liberty of the individual, freedom of trade and contract, equality before the law, extension of the suffrage, the reform of parliament, and the removal of the disabilities of dissenters. It has been the party of home rule for Ireland, it has combatted high protective tariffs, disestablished the church in Wales, laid heavy taxes on land and unearned increment, shorn the House of Lords of much of its power, made liberal provision for elementary education, opposed church control of the schools and enacted much social reform legislation. Stronghold of this party in Western England, Wales, Scotland, and Ireland.
- C. The Conservative party has been the traditional supporter of the existing order of things; it has defended the monarchy and the House of Lords; it has been the party of imperialism and of protective tariffs, (though it favors preferential treatment of the colonies); it has opposed heavy income and inheritance taxes; combatted radicalism in social and economic matters; advocated a referendum on bills rejected by the House of Lords; favored the retention of plural voting; opposed home rule for Ireland, etc. Note, however, that the Conservative party has cooperated with the Liberals in the enactment of many important measures of a social, economic and political character.
- D. **The Labor Party.** Of recent origin. (In 1906, 54 representatives of labor were elected to Parliament). It has generally acted with the Liberal party. Liberal party took over large part of program of Labor party. Socialism and trades unionism coalesced. Labor party favors legislation in the interest of the working classes, of women, children, the aged and the infirm; government ownership; taxation of incomes, inheritances and unearned increment; feeding of school children at public expense; old age pensions, etc. Note that in England labor representatives are sometimes appointed to places in the



cabinet. The influence of the Labor party has been out of proportion to its strength in Parliament. Why?

- E. **The Nationalist Party.** An Irish party whose chief object is home rule for Ireland.
- F. **The Sinn Fein Party.** An Irish party which demands absolute independence for Ireland.

## 2. In France:

- A. 1914-18. Conservatives and Liberals; 1871-76 Monarchists and Republicans; 1876-1919 various Republican groups.
- B. Rise of the Radical party in the early 80's. A party of social reform.
- C. 1893, Socialists elect 50 representatives to the chamber of Deputies. Two groups (a) independents; (b) unifies. 1899 a Socialist (Millerand) becomes a member of the Cabinet.
- D. 1898, appearance of the Socialist-Radical party. Differs from Socialist party only in degree. Strongly anti-clerical and anti-individualistic. Favors social reform, secular education, decentralization, more democracy. These three groups about 1898 constituted a bloc which has controlled parliament until now (parties of the Left). Other groups constitute the Right.
- E. The General Confederation of Labor. Largely a part of revolutionary syndicalism. Advocates class war and violence. Weapons: the general strike, boycott, and sabotage. Anti-militaristic and "anti-patriotic".
- F. Note that the characteristic feature of the French party system is the existence of a multiplicity of parties and groups. What is its effect on the working of the parliamentary system? Note also that in France national issues do not play the part that they do in England and the United States; that the organization of parties is very much like that of a club; and that candidates are not nominated by popular vote.

## 3. In Germany

- A. The two historic parties were the Conservatives and Liberals, the former being the supporters of the government. They were mainly a party of the landed aristocracy. Each group gradually broke up into two groups: (a) Conservatives and Free Conservatives; (b) National Liberals and Radicals. Bismark's reliance was upon the National Liberals until 1879.
- B. Rise of the Centre party (Clericals) in the early 70's, essentially catholic. Combated radicalism, defended the rights of the states and opposed secularization of the schools. Elected 60 members to Reichstag 1871. By 1903 strongest party in the Reichstag (102 members). 1879 Bismark turned to this party for support. 1894-1900 formed alliance with Conservatives. ("blue black" bloc).

C. Existing Party groups in Germany

1. Conservatives (various groups). Stronghold in the country districts (junker aristocracy). Defenders of the monarchy by grace of God, opposed to popular government and responsibility of ministers. Belief in state church and religious teaching in the schools. Advocate militarism and imperialism.
2. Moderates (Clericals, Radical Liberals and National Liberals).
3. Social Democrats. Best organized and strongest party in the Empire but inadequately represented in the Reichstag. (Scarcely represented at all in the Prussian legislature). Government repression of, 1878-90. Attitude of Emperor toward. No representation in the ministry until 1918. Favors responsibility of ministers, universal suffrage (including women), direct voting, secret ballot, redistribution of seats in Parliament, the initiative and referendum, proportional representation, freedom of speech, press, and assembly, secularization of the schools, income and inheritance taxes, international arbitration, militia in the place of a standing army, etc.
4. Minor parties: Poles, Anti-Semites, Guelfs, Alsatians, Danes.
5. (1919 various radical groups: Moderate Socialists, Independent Socialists, "Sparticides", etc.)

4. In the United States

- A. Early parties: Federalists and Anti-Federalists; 1830-54 Whigs and Democrats; present parties: Republicans and Democrats.
- B. The Republican party. Liberal interpretation of the Constitution, extension of the powers of the national government, champion of protective tariffs, colonial expansion, subsidies for the merchant marine, negro suffrage.
- C. The Democratic party. Strict interpretation of the Constitution, states rights; individualism; opposition to protective tariffs, ship subsidies, imperialism and extension of the powers of the national government by "constructions" of the Constitution. But note that neither party has always adhered strictly in practice to its traditional principles.
- D. Minor Parties: The Prohibition, Labor, Socialist and Progressive (1912-16) parties. The I. W. W.
- E. Attitude of Socialist parties toward the War
  - (a) In Germany the majority of the social Democratic party supported the war but a minority group in the Reichstag formed an independent organization and issued a manifesto condemning the action of the majority for supporting the war policy of the government.
  - (b) In France the Socialists supported the government's war policy from the beginning until the end.

(c) **In the United States** a national convention of the Socialist party of America held at St. Louis, April 7, 1917, proclaimed their "unalterable opposition to the war", called upon the "workers of all countries to refuse to support their governments in their wars," declared the declaration of war against Germany to be "a crime against the people of the United States and against the nations of the world," asserted that there had been "in all modern history no more unjustifiable war than this" and that no "greater dishonor had ever been forced upon a people." It urged upon all Socialists "continuous, active and public opposition to the war" and "unyielding opposition to all proposed legislation for conscription" (*Amer. Year Book, 1917, p. 395*). Some of the more moderate Socialists protested against these resolutions and subsequently withdrew from the party.

**Queries:** Why have the Socialist and Labor parties in the United States played an insignificant role as compared with those parties in Germany, France and England? (Only one Socialist member of Congress at present; few in the state legislatures). What is the explanation of the rapid growth of those parties in Europe? To what extent are the policies of the Social Democratic parties of Europe embodied in the platforms and policies of the Democratic and Republican parties in the United States?

F. Note that in the United States as in England the two-party system has generally prevailed; that the organization and methods of political parties are to some extent regulated by law; and that the parties in most states nominate their candidates by direct popular vote.

**Required Reading:** Beard and Ogg, Chs. 14, 15, 24. Lowell, Ch. 3; pp. 151-166; 302-8.

## IX. EDUCATION; THE CHURCH; SOCIAL REFORM

### 1. Education

- A. **In the United States.** No state monopoly of education but extensive national, state and local aid to education. State Universities and Colleges of Agriculture. Right to establish private schools and higher institutions of learning allowed without restriction. Little or no government control or supervision of private education. Private institutions allowed to grant diplomas and certificates. No citizen may be required to attend or support a sectarian school. Compulsory attendance of children of school age. Women students on equal footing with men.
- B. **In England.** No state monopoly of education. Many private schools, and some privately supported colleges and universities. But limited state supervision of private schools which receive state aid. Local school authorities free to choose teachers and determine curricula of studies. No religious tests required of teachers. Religious instruction not required by the state but church schools receive state aid. Women students generally on equal footing with men.
- C. **In France.** No state monopoly of education, although demanded by the Radical party, to eliminate clerical influence of church schools. Private schools and universities may be freely organized, though the latter may not grant degrees and they are subject to State inspection. Many church schools but no state aid for such schools. Clerical influence eliminated from public schools (secularization). Religion not allowed to be taught in public schools but teaching of morality required.
- D. **In Prussia.** Education regarded as a function of the state. Education determined by the state in accordance with the government's views of state functions and power. Virtual state monopoly of education. Nearly all schools, colleges and universities are maintained by the State. Private schools may be founded only with the consent of the State—a consent which is rarely given, (in 1911 only 480 private schools in the Empire). No private universities, not even theological schools. Private schools are at all times subject to government supervision and inspection. The government determines the curriculum, approves text books, prescribes qualifications of teachers and tests results by examinations. No freedom of teaching. Special teachers of religion. Teaching of religion required in all schools. Church authorities may visit, inspect and disapprove religious text books. Women students hitherto not on equal footing with men. Separate schools for girls. Not until 1909 were women admitted to

all courses in the Prussian Universities. "The mission of women may be comprehended under the words **Kuche, Kinder, Kirche**" (the Emperor). The school system is pervaded by the military spirit, many teachers being reserve officers.

**Criticism of the German System.** Excessive State control and interference. Bureaucratic regulation destroys freedom and initiative of teachers. Domination of the church (compare Paulsen, **German Education**, pp. 177-186).

What are the merits of the German system?

## 2. Place of the Church in the State

- A. **In the United States.** No state church. "Free church in a free state". No taxation for support of religious worship, no compulsory attendance upon religious worship. No teaching of religion required in public schools. But church property exempt from taxation, state protection of public worship, employment of chaplains in the army and in legislative bodies, punishment of blasphemy (Christianity a part of the common law); clergy permitted to celebrate marriages.
- B. **In England and Scotland.** An established church, recognized and in part supported by the State; creed prescribed by acts of Parliament; church governed partly by statute law; King head of the church; representation in Parliament; church courts formerly jurisdiction in cases of a matrimonial and testamentary character, "Free" churches in England—their legal position. Disestablishment of the church in Ireland (1868); in Wales (1914). Movement for disestablishment of the church of England—respective attitudes of the Conservative and Liberal parties.
- C. **In France.** Until 1905 church and State united. Catholic, protestant and Jewish clergy paid by the State. Head of the State nominated the bishops and archbishops. Church largely controlled education. Alleged hostility toward the Republic. Schools secularized (1882) teaching by religious orders prohibited (1904), Concordat abrogated and church disestablished (1905). All religious sects now on equal footing and clergy supported by church membership.
- D. **In Prussia.** Close connection between church and state. Evangelical State church. Prussian minister of ecclesiastical affairs. Struggle between the Catholic church and the State (*Kulturkampf*), 1873-1878. The Center party defenders of the Catholic church. Conservative party: public schools should be under supervision of the church. Social Democratic party would emancipate schools from church domination (secularization) and bring about complete divorce of church and state.

3. **Social Progress and Reform.** In each of the four countries here considered an immense amount of legislation in the interest of social reform and humanitarian progress has been enacted in recent years. Factory legislation originated in England, great attention has been given to

prison reform and social settlement work; England has been the classic land of "public relief" experimentation. The system of industrial insurance against accidents, sickness and old age originated in Germany nearly 40 years ago and has recently been introduced into England, France and the United States. In England and France systems of old age pensions have lately been introduced and workmen's compensation legislation has been enacted in all four countries. In the United States the liquor prohibition movement has made vastly more progress than in either England, France or Germany. Charity organization has received much attention in the United States; the organization of building and loan associations has provided a means by which workmen may own their homes; and the introduction of the indeterminate sentence, individualization in punishment, release of prisoners on parole and the establishment of the juvenile court have greatly humanized the administration of the criminal law. In England and the United States the legal and political disabilities of women have been largely removed; in France considerable progress has been made in this direction; in Germany alone they are still without political rights.

**Query:** Why have the Social Democrats in Germany uniformly opposed the social reform schemes of the government? In what respect has English policy been more in accord with the spirit of democracy?

## X. THE SYSTEM OF INTERNATIONAL LAW

1. International law is a body of rules, conventional and customary, which civilized States regard as binding upon them in their mutual relations with one another.
2. It differs from municipal (national) law in that it is not enacted by a legislature and there is no sanction for its enforcement other than public opinion.
3. Formerly the rules of international law consisted entirely of custom and usage but much of it (especially the rules governing the conduct of states in time of war) has now been reduced to written form and is embodied in treaties and conventions.
4. Steps in the process of codification.
  - A. The declaration of Paris of 1856.
  - B. The Declaration of St. Petersburg 1868.
  - C. The Act of Brussels Congress of 1874 (unratified).
  - D. The Geneva Conventions of 1864 and 1906.
  - E. The Hague Conventions of 1899 and 1907.
  - F. The Declaration of London of 1909 (unratified).
- G. War Manuals of different states. Compare the German War Code with those of the United States, England and France.

Note that most of the Hague Conventions of 1907 were technically not binding on any of the belligerents during the recent war because several of the smaller belligerent powers had not ratified them. But they were nevertheless generally regarded as binding. Moreover such of their provisions as were merely declaratory of the existing law of nations were legally binding.

5. Violations of international law during the recent war:

Invasion of neutral States; alleged blockade of neutral ports; extension of the doctrine of contraband; destruction of neutral merchant vessels, hospital ships and vessels engaged on missions of philanthropy; violations of the Red Cross Convention; employment of prohibited instruments and methods; unlawful contributions, fines and requisitions; maltreatment of prisoners and hostages; deportation of civilian populations; forced labor for military purposes; unlawful bombardments by land, sea and air; outrages against non-combatants, etc.

6. The German theory of military necessity and the right of reprisal

7. Ineffectiveness of international law

Possible means of strengthening it:

- (a) By application of the rules of the criminal law: trial and punishment of individual violators of the law.
- (b) By holding the governments of the violating belligerents responsible for damages resulting from violations of the law of nations.
- (c) By the collective intervention of neutral powers in behalf of a nation whose rights have been flagrantly disregarded by another State in violation of the rules of International law.
- (d) By the establishment of a league of nations to compel states to respect their international obligations and to submit their controversies to the decision of an international tribunal. (League to enforce law.)

8. Possible means of averting wars in the future:

- (a) Compulsory disarmament.
- (b) Voluntary substitution of judicial methods for the settlement of disputes in the place of recourse to armed force.
- (c) Establishment of a system of universal obligatory international arbitration.

**Queries:** To what extent has arbitration been resorted to in practice for the settlement of international differences? Give some American examples. With what countries has the United States arbitration treaties at the present time? What classes of disputes are excluded from their application? What has been the attitude of the German government toward arbitration? What is an international commission of inquiry? What were Mr. Bryan's "wait-a-year" treaties? Do you think secret diplomacy and the existence of secret treaties were in any sense responsible for the late war? Was the system of alliances between certain European powers prior to the war conducive to the general peace?

**Required Reading:** Text of the Hague Convention respecting the Laws and Customs of War on Land; Garner, the German War Code. (Copies on reserve in general library.)



## XI. AMERICAN WAR AIMS IN RELATION TO GOVERNMENT AND LIBERTY—PROBLEM OF INTERNATIONAL COOPERATION AND REORGANIZATION

1. **President Wilson:** "The object of this war is to deliver the free peoples of the world from the menace and the actual power of a vast military establishment, controlled by an irresponsible government which having secretly planned to dominate the world, proceeded to carry the plan out without regard either to the sacred obligations of treaty or the long established practices and long cherished principles, of international action and honor." (Reply to the Pope's Peace Appeal).

"These are the ends for which the associated peoples of the world are fighting and which must be conceded them before there can be peace:

1. The destruction of every arbitrary power anywhere that can separately, secretly, and of its single choice disturb the peace of the world; or, if it can not be presently destroyed, at the least its reduction to virtual impotence.
2. The settlement of every question, whether of territory, of sovereignty, of economic arrangement, or of political relationship, upon the basis of the free acceptance of that settlement by the people immediately concerned, and not upon the basis of material interest or advantage of any other nation or people which may desire a different settlement for the sake of its own exterior influence or mastery.
3. The consent of all nations to be governed in their conduct toward each other by the same principles of honor and of respect for the common law of civilized society that govern the individual citizens of all modern states in their relations with one another; to the end that all promises and covenants may be sacredly observed, no private plots or conspiracies hatched, no selfish injuries wrought with impunity, and a mutual trust established upon the handsome foundation of a mutual respect for right.
4. The establishment of an organization of peace, which shall make it certain that the combined power of free nations will check every invasion of right and serve to make peace and justice the more secure by affording a definite tribunal of opinion to which all must submit and by which every international readjustment that can not be amicably agreed upon by the peoples directly concerned shall be sanctioned.

These great objects can be put in a single sentence. What we seek is the reign of law, based upon the consent of the governed and sustained

by the organized opinion of mankind." (President Wilson, address at Mount Vernon, July 4, 1918.)

2. **Problem of International Cooperation and Reorganization**

A. **Proposed League of Nations. Objects:**

- (a) to establish and enforce the rules of international law.
- (b) to compel nations to submit their non-justiciable disputes to examination and report by an international commission of inquiry and their justiciable disputes to arbitration.

B. **The organization of the League. (Should Germany be admitted to membership?) Establishment of an International Court of Justice; an international police force; an international legislative body.**

C. **Means of enforcing the will of the League:**

- (a) Diplomatic.
- (a) Economic pressure, boycotts, non-intercourse.
- (c) Use of force.

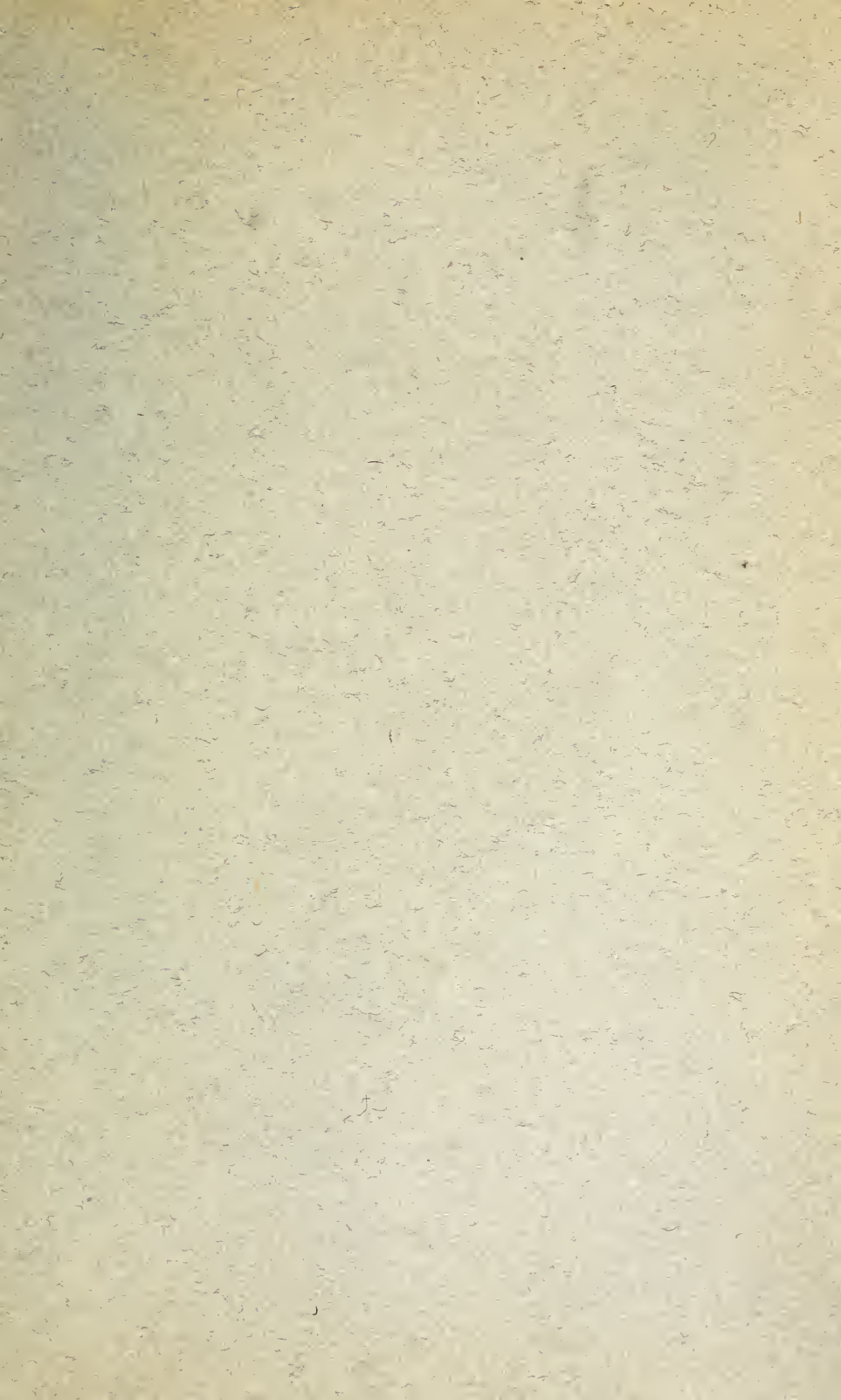
D. **Practical difficulties in the way of the organization of the League and the enforcement of its will.**

**Query:** Would the entrance of the United States into such a League be in contravention of our traditional policy in respect to entangling alliances?

E. **Existing examples of international cooperation. (The universal postal and other unions). Note that the countries belonging to the universal postal union have agreed to arbitrate all disputes arising over the interpretation of the Convention creating the Union.**

F. **Proposal for the creation of a super-national state embracing the great body of existing states. Is it desirable and practicable?**

**Required Reading:** Beard and Ogg, Chs. 27-28; Historical Light on the League to Enforce Peace; pamphlet, League of Nations (No. 131); Becker, America's War Aims and Peace Program. Copies on reserve in the general library.





**AN OUTLINE  
OF THE  
HISTORICAL BACKGROUND  
OF THE GREAT WAR**

**Prepared for the Committee  
in Charge of the Course in War Issues  
IN THE UNIVERSITY OF ILLINOIS**

**by**

**LAURENCE M. LARSON**

**PRICE TWENTY-FIVE CENTS**

**PUBLISHED BY THE  
UNIVERSITY OF ILLINOIS PRESS  
URBANA**



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## PREFACE

**Purpose.**—By direction of the War Department, the University of Illinois is giving this year a **Course on the Issues of the War** for members of the Student Army Training Corps. The purpose of this course is to give the citizen soldier an intelligent appreciation of the importance for civilization of the great conflict in which he is called to take his part. This purpose can not be accomplished merely by listening to eloquent speeches; it requires serious study. With this end in view, the instruction has been organized as follows:

**War Issues 1.**—The first quarter will be mainly devoted to the historical background of the war, with due attention to geographic and economic, as well as political factors; the reasons for American participation will be studied in the President's addresses and elsewhere. In the second and third quarters, the ideals of the belligerent nations will be studied in their governments, their philosophies, and their literatures. This outline covers the work of the first quarter only.

Each student will attend one lecture a week and two section meetings for discussion, as indicated in the **Time Table** published by the Registrar's Office. The section meetings will be devoted to oral discussion and written work. In these discussions, which will be based partly on the lectures and partly on required reading, students are encouraged to ask questions freely and every effort will be made to help them in thinking out their problems.

**Written and Spoken English.**—Clearness and accuracy in speech and writing are essential qualities of a good officer and will be insisted upon in this course. There will be one or more short written exercises each week prepared in the class room or out of it at the discretion of the instructor. Each student will be required to keep a note-book and to take brief but orderly notes on his lectures and reading.

**Books Required.**—The time required for preparation will be the same as for other University courses for which three hours credit is given. For this outside study each student will need to secure the following books in addition to this outline: Holt and Chilton, **History of Europe**, McKinley, **Collected Materials on the Study of the War**; and the following pamphlets: **The War Cyclopedia**, **Conquest and Kultur**, and Hazen's **Government of Germany**. The total cost will be about four dollars. The topics to be covered and the readings assigned are indicated in the following pages of this outline.

**War Issues 2.**—This is a combination of War Issues 1 with additional training in English composition based largely on topics connected with the subject matter of the course. In addition to the lecture, there will be three discussion meetings, making four hours in all and entitling the student to four hours credit.

EVARTS B. GREENE,

University of Illinois, Sept. 27, 1918.



## I. GEOGRAPHICAL ASPECTS OF THE WAR.

### 1. Certain prominent physical facts.

#### a. Rivers, lakes, and mountains: important chiefly as natural defenses.

- (1) The Seine river system: a complex of rivers cutting the region between Paris and the German frontier (the Marne, the Vesle, the Aisne, the Oise, etc.); of great importance as obstructions to German progress. especially since the Germans took the Belgian route.
- (2) The river system of northeastern Italy; note the importance of the Piave and neighboring streams in the last Austrian offensive.
- (3) The rivers of western Russia; note their general directions; of great importance in the Russian retreat, 1915.
- (4) The Masurian lakes: fatal to the Russian invasion of Prussia, 1914.
- (5) The Alps, the Carpathians, and the Vosges; note that the trench lines in the Vosges are only a dozen miles from the Rhine.

#### b. Military routes.

- (1) The Tigris valley; the Tigris is also important as a navigable stream.
- (2) The Vardar-Morava valley (Balkans): the route of the Teutonic advance through Serbia southward.
- (3) The lower Danube: important in the Teutonic invasion of Rumania.

#### c. Waterways and narrow seas.

- (1) The Dardanelles: note the effect of the closing of these straits on Russian participation in the war.
- (2) The Suez Canal.
- (3) Strait of Gibraltar.
- (4) The English Channel: note that the better harbors are on the English side of the Channel.
- (5) The Orkney route.
- (6) The entrance to the Baltic.

#### d. The North Sea: shallow in places; extensive sandbanks; good channels near the German coast rare; Germany practically immune from invasion.

### 2. Economic factors. —See Collected Materials, 90.

#### a. Coal fields of Germany and Austria.

#### b. Iron mines of Germany and Austria; note the fact that Germany has also had access to the iron products of Sweden.

#### c. Oil fields of Galicia, Rumania and the Caucasus.

#### d. Wheat fields of Hungary and southern Russia.

#### e. The vast mineral wealth and industrial establishments of Great Britain.

#### f. The phosphates deposits of Alsace; German monopoly of potash.

### 3. Advantages and disadvantages of position and location.

- a. Note the fact that Germany occupies a central place in Europe and that she has found it comparatively easy to shift men and materials from front to front. In this respect the allies have been at a disadvantage; communication across the Channel is easy, but the western powers have found it almost impossible to assist Russia or Serbia.

- b. Note the fact that England controls all the waterways that allow the central powers to communicate with the larger world: Suez Canal, Strait of Gibraltar, the Channel, the Orkney route.
- c. Note that after the Dardanelles and the Danish straits had been closed Russia had only two outlets, Archangel and Vladivostok; distance and climate are important in this case; today all the Russian outlets are sealed.

## II. GERMANY BECOMES A WORLD POWER. 1864-1875.

### 1. The Unification of Germany.

#### a. The causes.

- (1) The hopelessly inefficient organization of the German Confederation: a union of princes, not of states.
- (2) The rivalry within the Confederation of Prussia and Austria, both claiming leadership. (It is important to note that the aspirations of Austria lay largely outside Germany.)
- (3) Bismarck; prime minister; most important man in Prussia; of tremendous force, unusual abilities and ruthless methods (blood and iron); opposed to democracy and popular control of government; ambitious to remodel the Confederation and secure the leadership for autocratic Prussia.

#### b. The means: the Prussian army; aggressive warfare.

- (1) 1864. The German states attack Denmark and deprive the Danes of Schleswig-Holstein.
- (2) 1866. Prussia and Austria quarrel over the spoils; the Seven Weeks' War; Prussia is victorious and annexes Schleswig-Holstein, also several German states—4,500,000 new subjects; organizes North German Confederation (1867).

Note: these wars secured for Prussia the important naval station Kiel and the future site of the Kiel Canal.

- (3) 1870-1871, July to January. The Franco-Prussian War; results:
  - (a) France loses her position as first power in Continental Europe; becomes a republic.
  - (b) The South German states join the North German Confederation to form the German Empire.
  - (c) In the treaty of Frankfurt the Germans take Alsace and Lorraine and exact an indemnity of \$1,000,000,000; the Rhine becomes a German river; the boundary is pushed to the Vosges.
  - (d) The problem of Alsace-Lorraine dates from this treaty; it is kept alive and vigorous by Prussian efforts at Germanization. Note the importance of the iron fields of Lorraine; interesting parallels may also be drawn between the plans of campaign of 1870 and 1914.

#### c. The result: the new German Empire.

- (1) The most populous state in Europe excepting Russia; highly centralized in government—organized for efficiency rather than to secure civil rights; had developed the most efficient educational system in Europe from this point of view.
- (2) Militaristic: had the most efficient army in Europe; the Germans had great faith in the Prussian army—it had been victorious in three wars and had brought territorial increase and indemnity.
- (3) Autocratic: Prussia controlled, and Prussia was ruled according to the ideas of Bismarck.
- (4) The first power on the Continent: on terms of friendship with Russia and Austria (league of the three Caesars, 1872-1878).

### 2. The government of Germany.

- a. Prussia controls; has 236 of 397 members in the Reichstag (lower house); is able to veto important measures in the Bundesrath (upper

house); king of Prussia is emperor. (The Prussian Landtag, legislature, is not a representative body; it is chosen and dominated largely by the Junkers and the wealthier classes; compare the British House of Commons.)

- b. Emperor controls foreign policy; executive officials responsible to the emperor; government not in any sense democratic; administration not responsible to the legislature.
  - c. Oppressive as well as autocratic; treatment of subject races (Frenchmen, Danes, Poles) unintelligent and brutal.
3. **Note:** the development of self-confidence, arrogance, and chauvinism among the Germans is due largely to military success, profits from war, and swift rise to power among nations.

**Literature.**

\*Holt and Chilton, *History of Europe*, 74-116, 163-177.

\*Hazen, *Government of Germany* (16 pp.).

\**War Cyclopaedia*; see under "Autocracy," "Alsace-Lorraine," "Bundesrath," "German Constitution," "German Empire," "Kaiserism," "Kiel Canal," "Reichstag," "Schleswig-Holstein."

Notestein and Stoll, *Conquest and Kultur* (Jan., 1918), 11-41.

Note: An asterisk (\*) indicates required reading.

**Map Study:**—McKinley, *Collected Materials*, 92: growth of Prussia and Germany; on the opposite page note the fact that the German language area extends southeastward into Austria.

### III. THE BALKAN PROBLEMS TAKE FORM, 1875-1887

1. **Important geographical facts**
  - a. **Constantinople** and the straits: gateway of the Black Sea.
  - b. **Saloniki**: most important port on the Aegean Sea; route from Saloniki northward along **Vardar River**.
  - c. **Macedonia**: most difficult problem in the peninsula, population a complex of mutually hostile races.
  - d. **Albania**: backward mountain country; Albanians a nation but incapable of self-government.
2. **Conflicting ambitions in the Balkans**

Turkey anxious to maintain her territorial integrity.  
Russia planning for an outlet through the straits; this might make the control of Constantinople necessary; closing of the straits by Turks and Germans in 1914 made it impossible for Russia to hold her own in a long war.

Greece ambitious to annex Greek lands around the Aegean.  
Bulgarians striving for national existence and independence.  
Rumania, Serbia, and Montenegro eager for complete independence and enlargement of territories.  
Austria hoping to annex Turkish territory to the Aegean: Bosnia, the Vardar valley, Saloniki.
3. **Revolutionary movements; the Russo-Turkish War**

1875. Revolt in the northwest (Herzegovina); the movement spreads.  
1876. The Bulgars rebel; "Bulgarian atrocities."  
1877-1878. Turks defeated in war with Russia.  
1878. Treaty of San Stefano and the Congress of Berlin.
4. **Congress of Berlin** (noted chiefly for failure and error; the present war dates from its sessions; its settlement was largely the work of Disraeli and Bismarck):
  - a. Failed to put an end to the Turkish regime in Europe; made possible the present close connection between Turkey and Germany.
  - b. Failed to carry out fully the principles of nationality: gave independence to Serbia and Rumania but left millions of Serbs and Rumanians outside the boundaries of these states; did not satisfy the ambitions of the Greeks; divided the Bulgarian lands into three parts, leaving one part wholly under Turkish rule.
  - c. Gave the control of Bosnia and Herzegovina to Austria; an important Austrian advance toward the head of the Vardar valley.
  - d. Failed to deal with the Macedonian problem.
  - e. Note: (a) Serajevo is capital of Bosnia; (b) the "Saloniki front" was established largely to prevent Austria from reaching Saloniki.
  - f. Compare the territorial arrangements of the treaty of San Stefano with the settlement of the Congress of Berlin.
5. **The Triple Alliance and the Dual Entente** grew out of the settlement at Berlin.
  - a. Austria got two provinces without taking part in the war; Russia gained very little; Bismarck forced to choose between Austria and Russia chose to support Austria; Russia angry and humiliated; League of the Three Emperors dissolved.

- b. 1879, Austria and Germany form a Dual Alliance.
- c. France was encouraged (at Congress of Berlin) to seize Tunis; Italy looked on Tunis as her own future possession; disappointed she joined the Dual Alliance which now became the Triple Alliance, 1882.
- d. France seeks a friend and ally in Russia: **Dual Entente** finally formed, 1893.

**6. Later developments in the Balkans**

1881, Rumania a kingdom; 1882, Serbia a kingdom.

1885. The two Bulgarias united; 1887; **Ferdinand** prince of Bulgaria (later Tsar).

**Literature.**

\*Holt and Chilton, *History of Europe*, 187-223, 246-254, 283-289.

Hazen, *Modern European History*, 395-396; 462-463; 540-555.

\*War Cyclopedia; see under "Balkan Problems," "Bosnia-Herzegovina," "Bulgaria," "Congress of Berlin," "Constantinople," "Ferdinand I," "Macedonia," "Saloniki," "Serajevo," "Serbia," "Triple Alliance."

**Map Study.**

Holt and Chilton, 214: the settlement of 1878.

**Collected Materials**, 88: Balkan peninsula; note especially the river valleys; in mountainous countries these form the obvious routes and highways in times of war as well as of peace; note that the Morava and the Vardar valleys form an almost continuous route from the Austrian frontier to the Aegean Sea; at present an important railway runs southward through these valleys.



#### IV. ECONOMIC EXPANSION OF GERMANY: COLONIAL RIVALRIES

1. **Industrial resources:** cheap labor; a limited supply of coal and iron.
2. **Industrial needs**
  - a. Raw materials: cotton, silk, wool, rubber, copper, precious metals, minerals, woods, etc.
  - b. Markets at home and abroad.
  - c. Food supply: at maximum efficiency of agriculture Germany can provide food for 50,000,000; but Germany's industrial development has led to a decline in agriculture.
3. **Industrial growth:** tremendous development of manufacturing in Saxony and the Rhine country (note location of Essen); great activity in ship-building; steady growth of foreign commerce—almost trebled in 40 years.
4. **Economic policy: Bismarck**
  - a. Protective tariff, 1879: to stimulate manufacturing; to close German markets to foreigners.
  - b. Concessions to foreign traders in order to secure concessions (markets) in return.
  - c. State socialism to conserve labor: various forms of state insurance against unemployment, sickness, old age, etc; 1883-1889.
  - d. Colonial expansion: to secure raw materials, markets, and homes for surplus population. Bismarck was at first opposed to this policy; accepted it about 1883.
5. **"The scramble for Africa," 1880-1890.**
  - a. France crosses the Sahara from Algiers and Tunis and takes possession of the greater part of Sudan.
  - b. England works her way from the Cape northward nearly 2000 miles; occupies Egypt 1882; Cecil Rhodes plans Cape to Cairo Railway.
  - c. The king of Belgium organizes a state in the Congo valley (1885); this has since become a Belgian dependency.
  - d. Germany takes possession of Togoland, Kamerun, Southwest Africa (1884) and German East Africa (1885).
  - e. Outcome: Germany secured nearly 800,000 square miles of African territory but was not satisfied; note that most of these colonies are located near the Equator and therefore not suitable for settlement by Germans; the soil in Southwest Africa is not fertile. The plan: extensive possessions in the Tropics for exploitation; colonies in temperate regions for settlement.  
  
Note: the Allies have seized all the German colonies in Africa and elsewhere.
6. **Rivalry with England.**
  - a. Commercial.
    - (1) English merchants at a disadvantage in Germany because of the high German tariff; English markets open to Germans; English irritated; parliament (1887) enacted that all German wares offered for sale in the British Isles should be marked "made in Germany."

- (2) England owned half of all the tonnage on the seas; Germans built vigorously; but England built more than all the rest of the world. Germans irritated.
- (3) German commerce gained steadily on that of England till 1909; since then English trade has advanced more rapidly.
- b. Colonial: England has an empire of nearly 13,000,000 square miles, including India, Egypt, Australia, and much more; German writers have demanded that England share with Germany.
- Note: England has applied the principle of colonial self-government more extensively and thoroughly than any other European country.

#### Literature

\*Holt and Chilton, *History of Europe*, 264-279, 295-299, 317-340.

Hazen, *Modern European History*, 368-382, 403-408, 499-514.

\**War Cyclopedia*; see under "Coal and Iron," "German Colonies," "German Southwest Africa," "Krupp."

\**Conquest and Kultur*, 47-51, 71-74.

#### Map study

*Collected Materials*, 90; maps of coal and iron deposits; note the distribution of coal and iron fields in central Europe, particularly the iron regions of Belgium and Lorraine.

Holt and Chilton, 334: Africa; note the location of the German colonies with reference to the Equator; note also that Walfisch Bay and Zanzibar, the commercial outlets of German Southwest Africa and German East Africa respectively, are British possessions. (Germany in 1890 exchanged her claims to Zanzibar for Heligoland, see Holt and Chilton, 174, for location of Heligoland.)

## V. THE RIVALRY OF ENGLAND AND GERMANY ON THE HIGH SEAS; THE ENTENTES.

1. 1871-1914; no war in Europe (except in the Balkans), but nearly all the great powers armed to the teeth; old hostilities alive underneath the armor: armed peace.
  - a. Militarism: to maintain huge standing armies, professedly for defense, actually for aggressive purposes. In 1914 Germany had the greatest, best equipped, and most efficient army in Europe; England alone of all the powers had no great military establishment.
  - b. "Navalism": Germany has charged England with "navalism," excessive development of her navy. England tries to maintain a "two-power standard:" a navy equal to any other two. The character of the British Empire is such that large and swift-sailing men-of-war alone can hold it together.
  - c. A navy is essentially a weapon for defense; militarism is far more dangerous than naval development; but a combination of militarism and "navalism" is the greatest menace to the world's peace.
  - d. The German army is an element of influence in the government; in England the military is held to be subordinate to the civil authority; the contrast is important.
2. The development of the German Navy.
  1897. Von Tirpitz becomes secretary of the navy; continues as such to 1916; policy: (1) to make the German navy so strong that it would be dangerous for any nation to attack it; (2) to develop a high seas fleet.
  1898. German Navy League formed; to develop sentiment for a great navy; 200,000 members in 1900. Naval power increased.
  1900. Further increase in German navy.
  1906. New navy law; rivalry with England grows more intense.
  1908. Navy law: four battle-ships to be built yearly.
  1912. Further increase in ships and men.

Note: a parallel development of the German merchant marine promoted by government subsidies.
3. Naval Policy of England
  - a. To maintain the two-power standard: 1904, Sir John Fisher appointed first sea lord; designs the first Dreadnought, ready for action, 1906.
  - b. To strengthen fleet in the home waters; this accomplished by series of understandings and agreements.
  - c. To secure a limitation of armaments: England proposed this in 1906, 1907, 1909, and 1912; Germany refused to discuss the proposals; England suggested a "naval holiday" for 1913; not acceptable to Germany.
  - d. English navy (ships built or in building), 1914, 545; German, 302.
4. The Ententes
  1900. England realizes failure of policy of "splendid isolation;" she has no allies and many enemies; no fleet in the North Sea; Germans building a powerful navy.
  1902. Alliance with Japan; English ships brought from the North Pacific to the North Sea.

1904. The **Entente Cordiale**: settlement of all disputes and questions between England and France; English ships transferred from the Mediterranean to home waters.

1907. Understanding with Russia: the **Triple Entente**. Europe now divided into two powerful camps, the **Triple Entente** and the **Triple Alliance**; latter the more definite and complete.

Understanding with Spain as to Morocco.

1913. Effort of Sir Edward Grey to reach an understanding with Germany; almost successful; Prince **Lichnowsky**, the German ambassador, favorable.

5. **The question of Morocco**: Germany twice challenged France in this region, her purpose being in part to test the strength of the **entente**; found it in "perfect working order."

1905. Kaiser visits Tangier; serious diplomatic crisis; agreement reached at Algeiras, 1906. Importance of the **entente cordiale**.

1911. A German war ship at Agadir; a warning to France; England again supports France; Germany forced to yield.

1912. Morocco becomes a French protectorate; note that Spain has a share of Morocco.

#### Literature

\*Holt and Chilton, **History of Europe**, 299-316, 365-387, 456-474.

Hazen, **Modern European History**, 406-408.

\***War Cyclopaedia**; see under "Disarmament," "Dreadnaught," "German navy," "Militarism," "Navalism," "Navy," "Prussianism," "Triple Entente."

\***Conquest and Kultur**, 41-46, 111-124.

#### Map study

Holt and Chilton, 334; Morocco, Agadir, Tangier. The student should also be able to locate the chief naval bases of England and Germany: Portland, Portsmouth, Dover, Chatham, the Orkneys (Kirkwall); Emden, Wilhelmshaven, Bremerhaven, Kiel.

## VI. THE PAN-GERMAN MOVEMENT. SINCE 1890.

### 1. The Pan-German League

a. Founded 1890, reorganized 1893; membership about 50,000; closely associated with Navy League; influential with the imperial government; strongly supported and strongly opposed.

#### b. Aims.

- (1) To make the German state coterminous with the German race; this would involve addition of several Austrian states, part of Switzerland, perhaps parts of Russia.
- (2) To add related Teutonic peoples to the great German state: Holland, part of Belgium, the Scandinavian states.
- (3) To extend the power of Germany throughout the world; to force England to surrender her best colonies.
- (4) To assist Germans in other lands (United States, Brazil) to maintain *Deutschtum*: German speech, ideals, and mode of living. (The Pan-Germanists have always been hostile to the Monroe Doctrine.)

### 2. The Bagdad Railway scheme

a. The plan (first developed by Dr. Rohrbach about 1900): to build a railway from the Bosphorus by way of Bagdad to the Persian Gulf; to connect this with the railway system from Hamburg and Berlin to Constantinople; to build a branch line south through Syria and on toward Mecca and further.

#### b. Future possibilities of the plan.

- (1) To develop Asiatic Turkey, especially the Mesopotamian plain.
- (2) To divert a large part of the trade of eastern and southern Asia to this line (half of the world's population lives east of the Persian Gulf).
- (3) To seize at some future time the Suez Canal and thus secure control of both short routes to the Orient.
- (4) To connect the Syrian branch with the Cape to Cairo Railway and divert the trade of East Africa to German ports.

c. England spoiled the larger features of the plan by raising the Union Jack over Koweit, the proposed terminal on the Persian Gulf. (Koweit had asked for British protection before the Bagdad plan was completed.)

3. The Mid-Europe scheme (first fully developed by Naumann, 1915): this plan looks toward the formation of a great military and economic union of Germany, Austro-Hungary, and the Balkan states; the Bagdad Railway scheme fits closely in with the Mid-Europe plan.

### 4. Pan-Germanism as a cause of war

- a. The Pan-Germanists realized that their plans could be carried out only through war and welcomed it.
- b. Their constant agitation for colonial adventures disturbed the peace of the world; they helped to bring on the Morocco crisis.
- c. They preached constant hostility to England as the great obstacle to the achievement of their plans.

## Literature

\*Holt and Chilton, *History of Europe*, 303-304, 531-535.

\**War Cyclopedia*; "Berlin to Bagdad," "Drang nach Osten," "Mittel Europa," "Pan-Germanism," "Place in the sun."

\**Conquest and Kultur*, 52-66, 75-110, 136-157.

\**The President's Flag Day Address*, 7-30 (including foot-notes).

**Map Study:** see *Collected Materials*, pp. 92-93; cf. maps on p. 90 and note that the Mid-Europe plan would give the proposed union control of great areas of mineral wealth and of the Danubian wheat belt.

## VII. THE DECLINE OF RUSSIA

### 1. The Old Russia

a. Racial situation: 70 languages spoken; population about 70 percent Russian.

(1) The three Russias: Great Russia (central part), White Russia (west), Little Russia (southwest).

Note: Little Russia was in 1918 made into the Republic of Ukraine. The Ukrainians speak a dialect somewhat different from that of Great Russia.

(2) A rim of non-Russian peoples along the western border. Finns, Lithuanians (and Letts), Poles.

Note: these have all been surrendered by the Bolsheviki.

(3) To the east a variety of races, chiefly Turanian.

(4) Russification: since 1870 a determined effort has been made to drive the native languages of the non-Russians from public use (in churches, schools, theaters, administration, business) and compel the use of Russian.

Note: Russification was chiefly responsible for the doubtful attitude of the Poles in the present war and for the secession of Finland, 1817.

b. Autocratic and bureaucratic in government: country governed by a host of officials owing obedience to the Tsar only; no security of civil rights.

c. Medieval in social organization: nobles (highly privileged); official classes (privileged); mercantile class; peasants and laborers. The land was owned in part by the nobles, in part by peasants organized into communities; individual property in peasant land not general. Note: the promise of the Bolsheviki to distribute the land of the aristocrats among the peasants was an important factor in the success of their revolution, 1917.

d. Siberia: a vast region thinly populated; settled chiefly by Cossacks, convicts, political offenders, officials, emigrants, or by descendants of such. A broad belt of Russian population to Lake Baikal; a narrow strip from Lake Baikal to the Pacific along the Siberian Railway.

### 2. The New Russia

a. Revolutionary movements: last half century.

(1) Liberalism: dissatisfaction with autocracy and repression; demand for a constitution, civil rights, religious freedom, freedom of the press; the liberal movement was limited almost entirely to aristocrats and intellectuals.

(2) Nihilism: violent socialists assumed control of the liberal movement about 1875; revolutionary societies organized but hunted down by the police; Nihilists declare war on officialdom—assassination the chief weapon; Tsar Alexander II assassinated in 1881 (fourth attempt).

b. Industrial revolution; especially after 1890.

(1) Russia adopts the policy of state aid to industry chiefly by means of a protective tariff; foreign capital drawn in; loans made largely in France; great development of manufacturing; considerable building of railways: Siberian Railway, 1891-1902.

- (2) New demand for labor; peasants migrate to the factory towns; cities grow in size; dissatisfaction grows among labor. Proletariat and rich middle class grow together.
  - (3) Theories of socialism take root in the laboring class; Bolsheviki.
  - (4) Ideas of Tolstoi (poverty, communism, non-resistance) receive wide acceptance.
3. **An experiment in constitutional government; since 1906**  
 1904-1905, war with Japan; unpopular; disastrous; revelations of dishonesty and inefficiency; position of autocracy shaken.  
 1905, demand for constitutional rule; riots and massacres; strikes.  
 1906, First Duma (legislature) meets; quarrels with government—finds the Tsar had deprived it of real power; dismissed; failure.  
 Later meetings of the Duma also failures.
4. **Situation in Russia, 1914:** dissatisfaction to the point of revolt throughout Russia, especially among the socialists of the industrial centers; the land problem unsettled; the non-Russians in the west strenuously resisting Russification; international prestige of the empire shaken by the outcome of the Russo-Japanese war.

#### Literature

\*Holt and Chilton, *History of Europe*, 241-246, 341-354, 363-364, 420-425.  
 Hazen, *Modern European History*, 558-573, 580-582, 585-589.

\**War Cyclopedia*, "Bolsheviki," "Finland," "Lenine," "Milyukov," "Nicholas II," "Pan-Slavism," "Poland," "Russia," "Slavs," "Ukraine."

**Map Study:** *Collected Materials*, 20; note that Russia is not abundantly supplied with coal and iron and that the loss of Finland and Ukraine would be a serious blow to Russian industry; note also that Ukraine covers a large part of the great Russian wheat belt.—The map on page 98 shows the territory surrendered by the Bolsheviki in the west and southwest; it should be observed that these regions were not given to Germany, but that Germans hope to organize and control them.



## VIII. THE DISINTEGRATION OF TURKEY; THE BALKAN WARS. 1908-1913

### 1. The Turkish Revolution, 1908

- a. Character of Turkish rule: autocratic, arbitrary, inefficient, oppressive, bloody.
- b. The Young Turk movement: party professedly for a constitutional government, a humane administration, and liberal institutions of the western type; brought the army at Saloniki to its view; successful revolution; constitution proclaimed; Young Turks seized offices.
- c. Failure of the revolution: Young Turk leaders proved as inefficient and blood-thirsty as their predecessors; attempted Ottomanization.
- d. During the revolution (1908) Austria formally annexed Bosnia and Herzegovina, which she had been administering for Turkey, and Bulgaria declared herself wholly independent under a Tsar.

Note: this annexation was of tremendous importance, as the new Austrian subjects were largely Serbs; Serbia protested and mobilized but found no support.

### 2. The war between Italy and Turkey, 1911.

- a. Italy proceeded to conquer Tripoli, a Turkish dependency.
- b. To hasten the end of the war Italy attacked Turkey in the Aegean Sea and occupied twelve islands, including Rhodes.
- c. Turkey surrendered Tripoli to Italy; Italy promised to return the islands; has not done so—Italy and Turkey again at war.

### 3. The Balkan wars, 1912-1913.

- a. 1912, Bulgaria, Serbia, Greece, Montenegro form alliance against the Turks; Venizelos the chief spirit in the league. Allies demand reforms in Macedonia; Turks unwilling and begin to mobilize.
- b. October, 1912, the Balkan allies attack Turkey at four points; swift and furious fighting for six weeks; the Turk defeated at all points.
- c. May, 1913, treaty of London; dissatisfaction among the allies; Austria insists on an independent Albania—to shut Serbia from the sea.
- d. Second Balkan war: war for Macedonia; Bulgaria against her allies and Rumania; Bulgaria crushed.
- e. Treaty of Bucharest, August, 1913. Bulgaria was forced to return Adrianople to the Turks, to cede a strip of the Dobrudja to Rumania, and to leave the larger part of Macedonia to Greece and Serbia.

### 4. General results.

- a. The Triple Alliance was practically dissolved: Italy had attacked a friend of the Teutonic powers.
- b. Austria forced Europe two steps in the direction of war: (1) in 1908 when she formally annexed Bosnia and Herzegovina and angered Serbia; (2) when in 1913 she insisted on an independent Albania and thus prevented Serbia from securing an outlet on the Adriatic.
- c. Bulgaria became the mortal enemy of Serbia and naturally drifted into the Teutonic alliance in 1915.
- d. Only the Central Powers had shown any real interest in Turkey during the war; Russia was the ancient enemy, England and France were

friendly to Russia; consequently closer relations with Germany on the part of the Young Turks.

- e. The present war grew directly out of the Balkan wars: Austria had been balked by Serbia and Greece: Serbia lay squarely across the route to the Aegean; Greece had Saloniki.

#### Literature

\*Holt and Chilton, *History of Europe*, 438-455, 477-503.

Hazen, *Modern European History*, 409-415, 555-557, 594-606.

*War Cyclopedia*; see under "Austria and Serbia, 1913," "Balkan Wars," "Enver Pasha," "Macedonia," "Saloniki," "Turkey," "Young Turks."

#### Map study.

A map showing the racial and linguistic situation on the Balkan peninsula will prove very enlightening; a comparison of such a map with the boundaries drawn by the treaty of Bucharest will to a large extent explain the attitude of the various Balkan states toward the Great War.

## IX. THE EVE OF THE GREAT WAR. 1913-1914.

### 1. Conditions and problems.

- a. The balance of power was, in German opinion, seriously disturbed by the outcome in the Balkans: the friends of the Teutonic allies, Turkey and Bulgaria, had both been defeated.
- b. The feeling between Austria and Serbia was approaching the breaking point:
  - (1) Austria had twice blocked the plans of the Serbs: by the annexation of Bosnia, and by the creation of an independent Albania.
  - (2) Serbia had blocked Austrian plans of future annexations in the peninsula by extending her territories into Macedonia along the Vardar River.
  - (3) Serbians were supporting a strong Pan-Serbian movement in the Austrian provinces to the northwest.
  - (4) About the time of the treaty of Bucharest Austria was planning an attack on Serbia (August, 1913); see War Cyclopedia under "Austria and Serbia, 1913."
- c. The ancient rivalry and hostile feeling between Austria and Russia had become intensified as a result of the Balkan Wars.
- d. Relations between Russia and Germany were becoming strained:
  - (1) Germany had backed Austria in her Balkan ventures in 1908 (Bosnia) and 1913 (Albania); Russia was displeased.
  - (2) German officers headed by General Liman von Sanders were sent to Constantinople (1913) to reorganize the Turkish army; Russia protested against the appointment of von Sanders.
  - (3) The Germans feared that Russia would soon proceed against Turkey and that her own plans for operations in Asiatic Turkey might be upset.
- e. Relations between England and Germany were improving:
  - (1) Von Tirpitz appeared disposed to accept a naval ratio of ten to sixteen; rivalry passing.
  - (2) Sir Edward Grey and Prince Lichnowsky were negotiating an understanding with respect to the Bagdad Railway and German operations in the Portuguese possessions in Africa.
- f. A strong peace movement was active in America and parts of Europe.

### 2. Germany prepares for war.

- a. Constant and deliberate efforts made during the winter of 1913-1914 to stir up the war spirit in the German nation.
- b. Widening and deepening of the Kiel Canal being rushed to completion (it was finished July 1, 1914).
- c. By the military law of 1913 the German army was increased from 723,000 to 870,000 men.
- d. Plotting and intriguing going forward in the British possessions, particularly in South Africa and India.
- e. Industrial mobilization ordered early in June, 1914 (**Sisson Documents**).
- f. Unusual military manoeuvres ordered for August, 1914, in the Rhine lands; see **Collected Materials**, 35.

- g. German engineers completing a great system of strategic railways built from the Russian to the French and the Belgian frontier.
3. **Panic in Europe** after Germany decides to increase her army: France lengthens the term of service; Russia does the same; Belgium introduces universal service; powerful movement for preparedness in Sweden.
  4. **Murder of Archduke Francis Ferdinand** by Austrian subjects of Serbian nationality, members of a great Pan-Serbian organization.

**Literature**

\*Holt and Chilton, **History of Europe**, 504-538.

Hazen, **Modern European History**, 416-426, 590-594.

\***War Cyclopedia**: see under "Austria and Serbia, 1913." "Bernhardi,"  
"Pan-Germans urge War," "Serajevo."

**Collected Materials**, 32-35.

\***Conquest and Kultur**, 106-110, 125-131.

\***Prince Lichnowsky, My Mission to London**.

## X. THE OUTBREAK OF THE WAR.

### 1. A month of preparation, June 28—July 28.

June 28. Assassination of the Archduke at Serajevo.

July 1. Kiel Canal completed; Germany ready for war.

July 5. The Potsdam Conference. (At this conference which was attended by ambassadors, high officials, military chiefs, and industrial magnates the procedure against Serbia was probably determined upon and the European situation canvassed.)

July 21. Secret orders for German mobilization are said to have been sent out on this date; see **Collected Materials**, 38.

July 23. Austria sends her ultimatum to Serbia: Serbia ordered to put down the Pan-Serbian propoganda and to allow Austria to assist in the work; an answer demanded within 48 hours.

July 25. Serbia replies accepting eight of the ten Austrian demands; a ninth is accepted in principle, the participation of Austrian agents in the promised investigation of the antecedents of the crime at Serajevo is refused as being in violation of the constitution and laws of Serbia.

July 28. Austria declares war on Serbia, the Great War begins.

### 2. The efforts of Grey (England) and Sazonoff (Russia) to avert a general war.

(1) July 26. Grey proposes a conference of the ambassadors of France, Germany, and Italy with himself in London to discuss the Serbian question. Germany refuses. July 27.

(2) July 27. Von Jagow (Germany) suggests negotiations between Russia and Austria. Austria refuses.

(3) July 27. Sazonoff proposes "friendly conversations" with Austria; if these should fail he favors Grey's plan. No results. Austria declares war, July 28.

(4) July 29. The Tsar proposes a reference of the whole dispute to the Hague Tribunal. No results.

(5) July 29. Grey asks Austria to limit herself to the occupation of Belgrade and adjacent territory—to give time for meditation. No results.

(6) July 30. Sazonoff (Russia) agrees to stop military preparations if Austria will modify her ultimatum to Serbia. German ambassador replies that Austria cannot do so.

(7) July 31. Sazonoff promises to maintain a waiting attitude if Austria will stay her march and allow the powers to discuss her grievances. No reply.

(8) August 1. Austria announces that she is "ready to discuss her grievances against Serbia with the other powers."

(9) Germany had already sent her ultimatums to Russia and France; she declared war against Russia in the afternoon (August 1).

Note: It must be remembered that Russia had long maintained a sort of Monroe Doctrine among the Slavic peoples and that Serbia regarded Russia as her protector; an attack on the Serbs could not be a matter of indifference to Russia.

**3. Why the Central Powers wanted war.**

- a. Austria: to cripple Serbia and promote her own ambitions in the Balkans.
- b. Germany:
  - (1) To recover her position as first power in Europe which she felt she had lost.
  - (2) To break up the Triple Entente, or at least render it harmless.
  - (3) To promote the Pan-German plans in the Near East.

**4. The plan:** a swift march upon Paris while Austria kept the Russians occupied; the war was to be short, first victory over France, next the defeat of Russia. The plan failed for two chief reasons:

- a. Belgium refused to participate in the crime against France; her refusal delayed the march upon Paris and the French were given time to prepare.
- b. England entered the war in defense of Belgian neutrality.

Note with respect to Belgium:

- (1) The neutrality of Belgium was guaranteed by the European powers including Prussia.
- (2) A state must defend its independence or (if its neutrality is guaranteed) the guarantee becomes void.

**5. The European situation, August, 1914: distinctly favorable to Germany.**

- a. The recent strengthening of the military forces in Belgium, France and Russia had not yet yielded effective results.
- b. Revolutionary and disintegrating movements were gaining headway in Russia.
- c. The socialists in France were in arms against the military law of the year before.
- d. England was facing a civil war in Ireland and it was thought likely that she would have to deal with revolutionary movements in India and South Africa.

**Literature.**

\*Holt and Chilton, *History of Europe*, 539-579.

Hazen, *Modern European History*, 608-618.

\**War Cyclopedia*, "Albert I," "Belgium," "Bethmann-Hollweg," "Grey, Viscount," "Mobilization Controversy," "Potsdam Conference," "Sazonov," "Sazonov's Efforts to Maintain Peace," "War, Declaration of," "War, Responsibility for, in 1914."

\* *Conquest and Kultur*, 131-135.

## XI. "HOW THE WAR CAME TO AMERICA."

### 1. The struggle to maintain our neutrality.

a. President Wilson proclaimed America a neutral, August 4, 1914; appealed for neutrality in sentiment as well as in action; the act was generally approved by the nation.

### b. Controversies with belligerent powers.

(1) With England: the British government set out to prevent the neutrals from trading in contraband goods with Germany; this involved searching ships as they entered or left the North Sea, interfering with mails, and disorganizing commercial plans; questions of what was contraband also came forward.

(2) With Germany: the Germans made war on mercantile shipping contrary to accepted principles of international law; they torpedoed our ships and murdered our citizens on the high seas; this led to protests and lengthy diplomatic discussions. as in the cases of the *Lusitania*, the *Sussex*, the *Arabic*, etc

(3) The American government and the larger part of the American public regarded our controversy with Germany as the more serious of the two: in the case of England property rights were involved; in the case of Germany the question was one of human lives.

### 2. The development of anti-German sentiment.

(1) Strong pro-German sentiment among certain classes of "hyphenated Americans" in the early months of the war; an active minority openly for the allies; mass of the population anxious to remain neutral.

(2) Slow but powerful growth of anti-German sentiment caused by:

(a) The outrages on the ocean, especially the sinking of the *Lusitania*.

(b) The violation of Belgian neutrality and more especially the atrocious treatment of patriotic Belgians.

(c) The barbarous methods of German warfare.

(d) The discovery that America was used as a haven for plotters against England in her overseas dominions.

(e) The discovery that Germany was making war upon us in our own country by the destruction of munition plants, stirring up labor troubles, etc.

### 3. How America was forced to enter the war.

April 18, 1916. Our government threatens to break diplomatic relations with Germany over the *Sussex* affair; Germany yields but breaks her pledge.

Dec. 18, 1916. President Wilson addresses the belligerents in the interest of peace; no results.

Jan. 22, 1917. President Wilson addresses the Senate on the subject of peace in Europe in the light of American ideals and principles; no results; Germany was planning more violent warfare.

Jan. 31. Germany informs America that submarine warfare in its most ruthless form will be resumed; that a million square miles of the ocean are closed to the world's trade.

Feb. 3. Ambassador von Bernstorff dismissed; diplomatic relations with Germany broken.

Feb. 28. The Zimmermann note is published through the associated Press.

March 12. Orders are issued to arm American merchant ships.

April 2. President Wilson urges the recognition of a state of war with Germany.

April 6. Declaration of war passed by the House and signed by the President.

Dec. 7. War declared against Austro-Hungary.

#### 4. Why America entered the war.

- a. Because Germany continued in her violation of international law and the accepted rules of warfare.
- b. Because Germany was renewing her submarine warfare in a more ruthless form, resulting in the destruction of American ships and the loss of American lives.
- c. Because a Prussian victory would endanger the future peace of America and make a maintenance of the Monroe Doctrine extremely difficult.
- d. Because a victory for Prussian autocracy and militarism would endanger the future peace of the entire world.
- e. Because the war was taking on the form of a struggle between two principles: autocracy and democracy; to permit autocracy to win would be to repudiate our own history.

#### Literature.

\***War Cyclopedia**, "Ancona," "Arabic," "Atrocities," "Belgium" (several articles), "Bernstorff" (two articles), "Blacklist," "Blockade," "German Intrigue" (and other articles on Germany), "Hyphenated Americans," "Kaiserism," "Lusitania," "Mails, British Interference with," "Mercier, Cardinal," "Monroe Doctrine, German Attitude," "Neutrality," "Neutral Rights," "Peace Terms" (several articles), "Permanent Peace," "Submarine Warfare" (several articles), "United States" (several articles), "War Zone, German," "Why We Are at War" (two articles), "Zimmermann Note," etc.

\***Collected Materials**, 9-16 (President Wilson's War Addresses); 46-49 (German War Philosophy).

\***How the War Came to America.**

\***The War Message and the Facts behind it.**

Munro, Sellery, and Krey, **German War Practices**

Garner, **Why we are at War with Germany.**

**Map Study:** owing to the importance of the German submarine warfare as a factor in our entry into the war, it may be advisable at this point to point out the more obvious facts of the geography of this warfare: the submarine bases; the routes followed; the location of the more important sinkings; the sandbanks and shallow stretches in the North Sea, etc.



## XII. AMERICA AND THE WAR.

1. War aims of America.
  - a. To restore peace to the world. (This can be accomplished only by the defeat of the powers that made the war.)
  - b. To secure the future peace of the world. (It should be recalled that German leaders are already discussing the advisability of provoking another great war; President Wilson hopes to prevent future warfare to some extent at least, by a League of Nations to Preserve Peace.)
  - c. To ease the economic burdens of the world and to minimize the likelihood of future collisions by a reduction of armaments.
  - d. To promote the principle of nationality.
  - e. To give wider application to the principle of "consent of the governed."
  - f. To right the wrong done to France in 1871.
  - g. To restore and secure the freedom of the seas.
  - h. To liberate the peoples of Europe now held in subjection (Belgians, Serbs, and others) and to force restitution by the enemy.
2. War preparations of America.
  - a. Administrative: the reorganization of our governmental machinery; extension of the authority of the executive for war purposes.
  - b. Military: the creation of a huge army; the draft; the building of cantonments; the production of munitions and equipment; air craft; provision for the comforts and intellectual occupation of the soldiers.
  - c. Naval: expansion of the navy; the building of ships for the transportation of men and materials; the Shipping Board.
  - d. Economic.
    - (1) War taxation and liberty loans.
    - (2) Systematic production and conservation of food; the Food Administration; the farmer's share in the war.
    - (3) The conservation of fuel; the Fuel Administration.
    - (4) Federal control of transportation and of telegraph service.
    - (5) Legislation to promote peace and efficiency in the industries.
  - e. Moral: systematic dissemination of information as to the issues of the war and our duties and share in the conflict.
3. The achievements of America in the war.
  - a. The entry of America into the war restored the courage and confidence of our Allies after the demoralization and defection of Russia.
  - b. America has succeeded in defining the aims and objects of the Allies more sharply than they have been hitherto stated.
  - c. America has sent an immense army to France which has rendered notable service at many points and in many important movements.
  - d. The American navy has assisted in reducing the danger from the activities of the German submarine.
  - e. America has lent vast sums and shipped immense quantities of food to our Allies.
  - f. America has proved that a democracy can strike as swiftly, as vigorously, and as effectively as an autocracy.

Literature.

\*War Cyclopedia, "Aim of United States," "Alien Enemies" (two articles). "America" (several articles), "Cantonments" (two articles), "Committee on Public Information," "Council of National Defense," "Draft," "Espionage Act," "Food Control Act, Enforcement," "Food," (various articles), "Four Minute Men," "League to Enforce Peace," "Navy," "New Navy," "President," (two articles), "Red Cross" (several articles), "Ship Corporation," etc.

\*Collected Materials, 20-25 (President Wilson's Addresses).

Map Study: there are several possibilities in this week's work.

- a. The student should become acquainted with the location of the various centers (cantonments, etc) for the training of the army.
- b. The student should learn the geography of the Western Front, especially the location of the American units.
- c. The student should learn where in other parts of the world our men are at work: Archangel, Italy, Siberia, etc.













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