

PUBLIC HEALTH

First Aid in War Emergency

How to Make Apparatus

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Science Clubs of America Editor

As cities, industries and schools prepare for emergencies that may arise from the war, there are some pieces of apparatus for use of local groups that may be made by science club members and others who are handy with tools.

For instance, consider first aid groups and classes. Both for actual use in emergencies and for instruction purposes, such things as splints and stretchers are used. In many places there may be lack of such equipment. Groups or individuals may wish to volunteer to supply any lack that exists. Others may wish to equip their own homes and institutions with such apparatus and learn how they should be used.

So great have been the demands for instruction in first aid that chapters of the American Red Cross and other such groups have been confronted with the double problem of training first aid instructors to teach first aid classes, and at the same time of supplying the necessary equipment for the instruction. Some of the needed equipment, such as splints, may be made easily by the average "home mechanic."

Splints may be made of practically any good clear-grained wood. The War Department recommends that splints be made of basswood, yucca or other equal material. Therefore, if you can get this material it is suggested that it be used. All wood should be planed smooth and sanded on all sides and edges. A rough surface might splinter. For training purposes first aid classes can use splints made from even a good grade of plywood, so you can substitute

this if basswood cannot be obtained.

These splints are usually used to immobilize temporarily a fracture. Suggested dimensions are given on the diagram. The 56- and 65-inch splints should be notched at one end only; the notch should be two inches deep at the apex of the V.

The 65-inch splint may be made in two sections so that it can be folded for ease in carrying.

It is recommended that after the splints have been made holes be drilled clear through near the center to accommodate bolts, wing nuts and a leather or other handle. In this way the splints can be transported easily. Such a combination may be taken apart quickly for use either by the instructor or in the field.

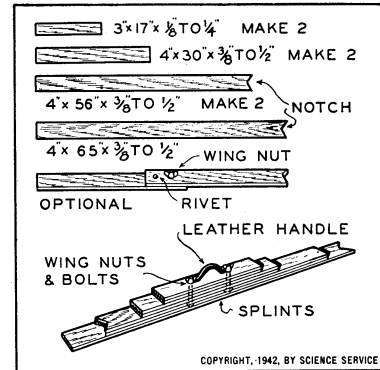
Some local first aid groups might like to experiment with a new style of chair carrier, not yet officially approved by the Red Cross. This chair carrier, made of canvas or heavy duck, is the suggestion of Mrs. L. K. Thompson of Memphis, Tenn. She calls it a "Queen's chair."

Briefly it is a canvas carrier which may be combined in clusters of three to form a stretcher, as the illustrations show. A single one of these Queen's chairs may be used to carry an injured person. Two people do the carrying. The person in the foreground is not shown in the illustration.

Such a chair has other advantages. For example, it could be employed to transport an invalid up and down stairs. It might be used to carry bags of sand. It might be handled by air raid wardens, auxiliary firemen, rescue squads, auxiliary police, bomb squads, road repair crews, nurses' aid corps, etc. The carrier could be used in camp and



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at the seashore. We have not scoured all the possibilities.

The construction is detailed in the diagram. A 36" width of No. 6 or No. 8 duck (or canvas), is split lengthwise. (This makes two carriers.) The edges are turned in and hemmed to make a piece 17" wide, 42" long. Heavy canvas web, one and a half inches wide, is used to form the continuous loop at the extreme ends. This loop is sewn into a hem five inches wide at both ends. (The other two inches of material are for the turned in edges.) The details are given in the illustration.

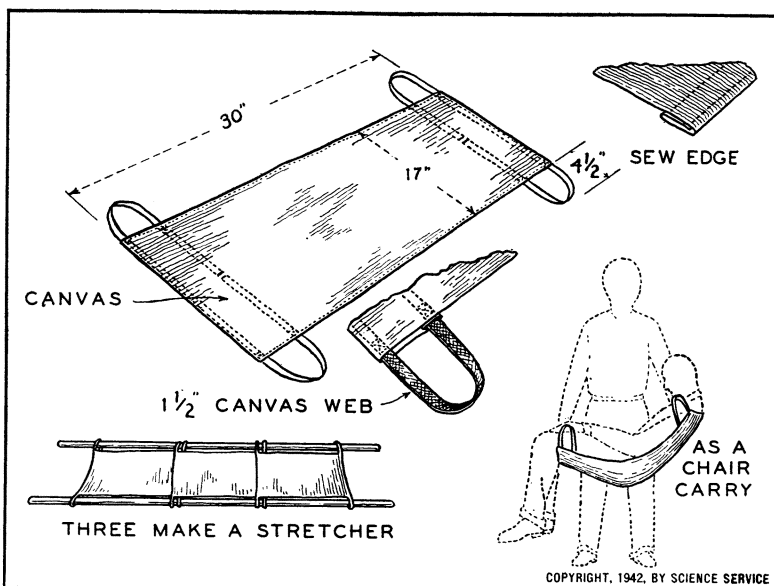
Many sewing machines found in the average homes will not handle No. 6 or No. 8 duck. It is too heavy. For this reason hand-sewing may be necessary or the services of a shoemaker might be enlisted. If the material is to be hand-sewed a sailmaker's needle or a darning needle can be employed. In the detail drawing note particularly the reinforcement sewing where the hand-holds extend from the canvas. All seams should be double stitched.

This completes the Queen's chair. Three of these units, interlocked on two poles, may be used as an improvised stretcher. The way in which this is done also is shown in the diagram.

Before you start making Queen's chairs for local use, make sure that the local units can use them.

Unless you can get priority ratings through local chapters or civilian defense organizations, you may not be able to use the canvas or duck called for in the original specifications. Possible substitutes would be very heavy cotton blankets or old rugs or carpet cloth. Consult the local group for which you are making the Queen's chairs or stretchers to be sure you pick a suitably strong and washable substitute material.

Your local Red Cross, civilian defense units, industrial first aid organizations, or other groups are likely to be able to use the material suggested. But it is suggested that you check with your local groups before turning out these items. Advise whoever



OBSERVER



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is in charge that you would like to make such things for them. If one group has enough of this sort of equipment, another may be able to use it.

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NEWS OF CLUBS

LONG BEACH, N. Y.—At the Long Beach High School a Science for Citizenship Club has been formed. Membership is open to all junior and senior high school students. The members of this club hold that faulty thinking is responsible for a preponderance of the world's ills and that science presents the only basis upon which all these problems will be solved. Of course it is a truism that the language of science is the same the world over. It represents a common ground upon which all can meet. At present the experimental work of the club is devoted largely to conservation projects. Work is now being done to determine if Long Beach sands will support vegetable growth. This club is sponsored by Mortimer Schultz, general science teacher.

BALTIMORE, Md.—Glass blowing and experimental work with liquid air are two of a number of projects which at present are interesting members of the Edgecomb Science Club. Edgecomb Academy. Studying birds, taking care of animals, collecting insects, and making a file of finger prints are topics which also get their share of attention. Learning how to handle glass and manipulating this in the laboratory will prove of great value to young scientists when later they work in scientific laboratories. Today the necessity of dealing in small fractions of chemical substances becomes more and more apparent. Often this necessitates that special laboratory glassware be prepared for carrying on the research. The Edgecomb Science Club is sponsored by Mrs. J. R. A. Davis, instructor in biology.

RICHMOND, Ind.—The study of Richmond fossils is being undertaken by members of the Hibberd Science Club, Hibberd School. The members have many other interests in addition. These spread into the fields of radio, zoology, chemistry, biology and photography. Reports on the various topics are given regularly by the club members. The group is sponsored by Velma McCulloch, science teacher.

CHICAGO, Ill.—Members of the De La Salle Biology Club at De La Salle High School are studying land erosion. Models are being built to illustrate the factors which are responsible and which can be used to control the washing away of the soil. Field trips and laboratory projects also are encouraged. The club is sponsored by Brother George, F.S.C.

LANSDALE, PA.—A telescope is being made by members of the Pioneer Science Club of Lansdale Junior High School. With it the members hope to carry on studies in astronomy. Some of the members are breeding tropical fish. All of them carry on experiments beyond the regular classroom assignments. The sponsor of this group is Russell F. Fisher, science teacher, who reports that the *SCIENCE NEWS LETTER* is used extensively for developing ideas.

FREEPORT, Ill.—More and more the science clubs formed in schools, colleges, academies, settlement houses and many scout groups are extending privileges of membership to "outsiders." Such favorable regulations make for greater activity and vigor because guest members frequently are able to benefit the club by furnishing specimens, materials and advice.

Among the clubs formed in schools which are not limited entirely to student membership is the Freeport Nature Club at Freeport High School. This group conducts nature hikes during which birds, flowers and trees are studied. Then, too, the members lay out a nature trail and see to it that this is taken care of constantly. Later this year the organization will hold an Open House Exhibits at which projects will be displayed. This organization is sponsored by Thomas G. Spring, teacher of biology at the high school.

MT. HERMON, Mass.—The Faraday Scientific Club at Mt. Hermon School seeks to keep in touch with current achievements in the scientific field and then disseminates this information in the school for the benefit of all science classes. The members of the club, furthermore, are encouraged to make and present various scientific projects. The group is sponsored by George R. Laurence, instructor of chemistry and biology.

POCATELLO, Idaho—The Science Club of the Senior High School is supervising a visual education program in addition to conducting experiments and preparing assembly programs. Mixed with these more serious club activities are parties held by and for club members. The club is sponsored by R. A. Brown, Head of the Science Department.

Many science clubs hold socials to which the members look forward. The more serious business of administering to scientific interests when followed by a social rounds out a program of several hours duration. This spirit of communion is something to which all Science Clubs of America members wholeheartedly subscribe.

OSHKOSH, Neb.—Interests of members of the Science Club at Garden County High School are varied. Some of the members are building radio sets. Others are conducting experiments along "Chemical Gardening" lines. A third group is engaged in setting up and operating a weather station. The club, as a whole, conducts chemical experiments and aids in setting up new exhibits for the high school museum. The group is sponsored by Andrew A. Weresh, science instructor.

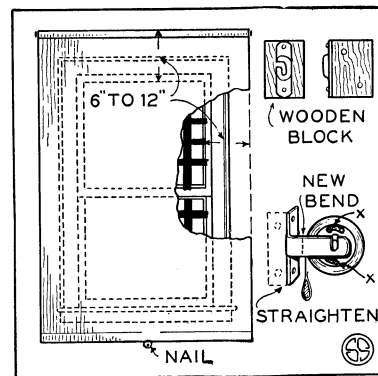
SIOUX CITY, Ia.—The Central Institute of Technology is a club formed at Central High School. Each year this club holds a Science Fair. Weekly meetings with student demonstrations and guest speakers are included in the program of this club. The group is sponsored by Miss Curry, science teacher, and has additional affiliations with the State Junior Academy of Science.

SOMERVILLE, N. J.—In an effort to become acquainted with present developments in the field of chemistry members of the Positrons Chemistry Club at Somerville High School start by preparing synthetic materials. Experiments with those materials then familiarize the members with the properties and uses. To further understand the conditions under which such chemicals are manufactured the members visit industrial plants which manufacture the same materials commercially. Motion pictures of the manufacturing processes are also exhibited and lectures are delivered by scientists. Along with this instructive information experiments are conducted to acquaint members more fully with the phenomena of cold light, X-rays, fluorescence, fluorescent lighting, etc. Liquid air, used in some of the manufacturing processes, receives its share of attention. The club is sponsored by Lawrence L. Moore, chemistry teacher.

LEBANON, Conn.—In what direction do your scientific interests flow naturally? That question is difficult to answer particularly by a person who either is a newcomer to science or who has not definitely decided upon his future work or hobby. It may be that the system evolved by the Lyman Science Forum, established at Lyman Memorial High School, offers a solution to the perplexity. The club is divided into groups on biology, chemistry, electricity and First Aid. Each of these groups meets separately to work out experiments or plan activities. At alternate meetings one of the groups gives a report and demonstrates the work it is doing. At any period any member may shift allegiance from one group to another, or an entirely new and different topic may be approached by a newly formed group. Each group must "produce the goods" or it will have no members. The sponsor is E. Richard Sollanek, science teacher.

BRASHER FALLS, N. Y.—Men of science from distant towns frequently lecture to members of the Luminar Science Club established at Brasher and Stockholm High School. This club has had a very successful "Penny Bazaar." The funds provided by the "Bazaar" were used to purchase materials and equipment. Members also hold a Science Fair at which projects and exhibits are displayed. The group is sponsored by Winom Mahoney, science instructor.

Clubs are invited to become affiliated with SCA for a nominal \$2 for 20 members or less. You can become an associate of SCA for 25 cents. Address: Science Clubs of America, 1719 N St., N.W., Washington, D. C.



HANDICRAFT

Paper Blackout Shades

Defense agencies have requested the American public not to purchase quantities of dark cloth for making window blackouts. In fact, it has been recommended that any heavy material through which light cannot filter readily, even if not black, is perfectly satisfactory.

Many five-and-ten-cent stores are selling dark paper shades. These, if properly fitted to the window, will prevent light from filtering out. The shade should be mounted close to the wall. This may necessitate rebending the brackets, thus making them shorter; or mount new brackets on small wooden blocks.

To keep the shade tight, pry out the catches from the spring end (marked "X" in the diagram). This places the shade under constant spring tension. In its pulled-down position, the shade may be held in place by a small bent nail.

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War Service Activities For Science Clubs

Detailed suggestions as to how science clubs may make their contribution to our war effort by performing useful functions in their local communities are being compiled and will shortly be issued in a special war service bulletin. High schools now without science clubs or with clubs not now affiliated with SCA may begin cooperation in the national movement by organizing for this war work.

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SCIENCE CLUBS OF AMERICA

SCA, under Science Service sponsorship, continues the pioneering activities of the American Institute of City of New York over the past 15 years and the Student Science Clubs of America which was merged with that movement. The American Institute continues to foster the regional activities of the junior clubs of the New York City area as a science center.

To effect close cooperation between the American Institute and Science Service, an advisory committee on SCA is being formed.

The principal SCA staff consists of Joseph H. Kraus, SCA editor, and Margaret E. Patterson, SCA membership secretary, based at New York in offices at 310 Fifth Avenue, also occupied by the American Institute.