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MANUAL TRAINING REPRINTS

SERIES A NUMBER 4

INEXPENSIVE BASKETRY

BY

WILLIAM S. MARTEN



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Monograph



AT WORK ON COILED BASKETS.

MANUAL TRAINING REPRINTS

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FOREWORD.

MOST of the existing treatises on basketry either assume on the part of the reader some knowledge of the processes involved or, by covering a field unnecessarily wide, cumber the individual teacher with material for which he has no practical use. The author of this little book is to be especially commended for limiting himself to a few of the elementary problems that confront every teacher who attempts to deal with basketry in the classroom, and for the skill with which he selects and presents the subject matter.

When this material first appeared as a series of articles in the MANUAL TRAINING MAGAZINE it attracted immediate attention. The continued interest and repeated inquiries more than justify its revision and publication in this more convenient form.

From a technical point of view the series of photographs constitutes a rather unusual achievement in the attempt to illustrate a sequence of manipulative operations. As has been remarked of them, they are "illustrations which really illustrate".

For those who wish to take up the subject for further study, a bibliography is added which is believed to be one of the best in form available for general distribution. —WILLIAM T. BAWDEN.

New York City,
January 17, 1913.

INEXPENSIVE BASKETRY.

I. INTRODUCTION.

THE basketry herein described is a result of several years' experience with such work in the South—in the third to the sixth years of the city schools of Durham, North Carolina. It has been successfully carried on at slight expense, and has proved itself to be constructive work of real usefulness. In the illustrations will be seen a number of different kinds of baskets, all of which have been found entirely feasible for elementary school work. Educators have become interested in the results of this work, so that teachers from other schools have come to learn the processes in order that they might introduce it in their own communities. In this way the work has lately been extended to a number of school systems thruout the state. It is earnestly hoped that this description with the aid of the illustrations will enable teachers to get this work successfully started in schools where such work is especially adaptable. The appended outline is suggestive of a working plan for the several grades.

Special acknowledgement is due Principal William P. Dawkins of the West End School of Durham who so kindly assisted and who made it possible to put the basketry work in its present form in Durham. Thanks and credit are due many others for criticisms and suggestions, especially Charles Marten, director of Industrial Arts, Jewish Orphan Asylum, Cleveland, Ohio, and Professor P. E. Davidson of the educational department of Stanford University, California.

ESSENTIAL VALUES THE MAIN CONSIDERATION.

It is a decided advantage for any form of handwork to be inexpensive, but to have a place in the school curriculum it must be handwork with values that are essential to both the individual and the community. All school handwork must be that in which children can be interested, and it must be closely related to life outside the school. The special form of constructive work herein described has been tested in the schools. The result shows that children become intensely interested in it, and that it can be vitally connected with their home and community life. From an educational standpoint, any form of handwork besides being easily adaptable to school use, should have values that involve a

consideration of three factors: first, the correlative value of the materials used; second, the development value of the motor training involved; and third, the economic value of the articles made.

EDUCATIONAL VALUES.

The use of local materials provides for a definite correlation with the other school subjects. A study of the courses of basketry in the schools thruout the country, when considered with the surroundings of these schools, will reveal that one particular advantage of this constructive work is almost entirely lost sight of. In most cases the materials are obtained from New York or elsewhere, while the valuable materials growing in the immediate vicinity of the school are neglected. In almost every locality, materials for basketry can be obtained near the school. In the Southland, especially in the localities of rich vegetable growth, the many tough grasses, pine needles, and like materials from marsh, field, and wood around the school house and the children's homes, can readily be gathered by the pupils themselves. If the materials in this way are obtained at first hand, rather than gotten from afar, a permanent association of interest is established. The child is easily given a broad knowledge concerning such materials. Their use as a primitive necessity, the nature of the materials relative to their use, the growth of the plant life—a study of all such factors give natural correlations with other school subjects and begin with things about which the children have some knowledge. When these relations are made the children understand more clearly the means necessary to secure the desired results. This will help the elementary school teacher to vitalize her work.

Second: The values in and consequent need of motor training especially in the elementary school are now fully established. Basketry as a form of motor training in the elementary school is valuable not only because the essential processes are simple, but because they require a very definite training of the judgment in the use of the eye and the hand. From the simple basic processes, they can be made more complex as desired. The development obtained involves the following factors: (1), the deciding upon suitable materials for the work in hand; (2), the getting of even spaces; (3), the sensing of a strong outline; (4), the judging of fine proportions; (5), the obtaining of beautiful color harmonies, such as those formed by the combination of the soft greens of the rush, or the rich grays and brown of the pine needles, with the

subdued yellow of the palmetto or cane, and (6), the splendid examples of line rhythm as the stitches move around and outward from the center, and mount around and upward to the top. These are art principles in applied design of a very practical type. A well made basket, evenly stitched, of good proportion and outline is evidence of the artistic merit of this work. In the classroom a few poorly made baskets and a number of well built baskets of good outline and proportion as examples of what to avoid and what to strive for, with suggestions of caution against the one, and encouragement to strive for the beautiful in the other, will furnish an incentive for the pupils to strive for the highest type of workmanship.

Third: The economic value is in the varied and practical uses for which the baskets are made. If the basket made has a definite use in which the children are interested they can be made to feel that they are putting their own selves into the work. Basketry of this kind includes the making of table mats, serving trays, laundry hampers, door mats, fruit trays, baskets for fruit, for church collections, for waste paper and trash, for carrying lunch, for trinkets and jewelry and almost any receptacle for holding or carrying purposes. Such baskets when thoughtfully chosen serve a very practical use in the community or in the homes of the children. When the children are taught to make profitable use of the raw materials that lie immediately at hand, they are realizing how to master their own environment. And when this is the making of a commercially valuable article with material that is previously considered of no value, there is involved an important economic aspect. If the school is to prepare the children for doing their share in meeting the social needs of the community, it is of importance that the children be made to realize this economic aspect. Work, chosen with such an aim, provides a definite purpose in the minds of the children toward which their activities are directed. Therefore such activities cannot be aimless.

PRACTICAL ADVANTAGES.

The interest of all, the ease and convenience of handling, the variety of materials easily procured and adaptable to many grades, make basketry an especially desirable form of work. From experience with this work in the school room: (1), it has been found to afford equal interest for boys and girls; (2), it is clean, and practically dry, (water being needed only when starting the baskets), (3), it is light and easily handled by

the younger children; (4), when carefully constructed the baskets are very durable; (5), the native materials furnish a very prolific source of supply so that to the average community the economic advantage of this work is a strongly appealing factor. In some communities, especially the rural ones, this work can be carried on with no expense whatever. In other communities the expense for equipment and maintenance is very slight. Even in many of the larger cities materials can be obtained very reasonably. After the material is located in the outskirts of the city the only cost should be that of transportation; (6), since the cured raw material can be piled up and the baskets in the process of construction can be telescoped, but little space is required for storage purposes; (7), the variety of materials obtainable and the various uses to which the baskets may be put, afford a great variety of processes adaptable for the different grades; (8), the teacher with a minimum of experience in such work can carry it on with satisfactory results.

Various materials and types of baskets afford a variety of processes. Numerous processes, more or less explicit, are described in the various books on basketry, many of which contain excellent suggestions for various types of baskets.[1] The discussion that follows will have in mind the various types of baskets, but in order to be definitely clear, the present discussion on processes will deal only with the type of the continuous coiled basket.

EQUIPMENT.

The tools needed are few and very inexpensive. The only tools that are absolutely necessary are scissors or knife, and the needle, for large coiled work. The needle can be any sharp pointed instrument suitable for making an opening in the coil. They can easily be made by the pupils themselves, or enough for the whole class can be made by a few of the boys. A small piece of bone (horse bone is beautiful and of a fine texture), about four inches long, or the handle of a tooth brush, with one end filed to a point, is most satisfactory and lasting. A piece of wood (hard wood is preferable), does the work very well. The point must not be sharp enough to cut. This sharpened point pushed into the

[1] Tinsley: "Practical and Artistic Basketry;" White: "Baskets and How to Make Them;" James: "Indian Basketry;" Turner: "The Basket Maker."

coil where the stitch is to be, makes an opening thru which the material used for the thread is drawn. For the small coiled work, where the material used for the thread is pliable, such as raffia, silkatine, or a fine tough grass, a needle with an eye is required. These needles should be fairly large so as not to be easily lost. Those ordinarily used for darning, or "No. 19 Tapestry" needles as used for raffia work, are very desirable.

MATERIALS.

The great variety of adaptable vegetable fibers allows for a wide range in the choice of materials. The supplies used are mainly determined by the available vegetation. A little experimenting with the necessary processes in handling these available materials will be productive of excellent results. The great bulk of the continuous coiled basket is made up almost entirely of the coil itself. This can be made up of a great variety of materials, such as the tough rushes and grasses from the marshes and meadows, the long and short needles from the pine trees, the stalks of the oats, rye, and wheat, and even the husk and leaves of the corn, the leaves of the cat-tail, the flags, and the palmetto when split up into fine strips. There are very many materials that can be satisfactorily used. Toughness and length are the most desirable qualities. Select the toughest and longest vegetable fibers that can readily be obtained in large quantities. Avoid, however, the rough edge grasses as they cut the hands. If rushes and grasses are not available, the stalk of the grains—such as the wheat, oats, rye or the hay, can be satisfactorily used. Some one of these, or the parts of the corn, the cat-tails, and the flags, are available in almost any locality.

The material for the thread must be especially adaptable to the basket. For sewing up the coils, a long, narrow, strong, and pliable substance is necessary. This we will call the thread. For this purpose the tough flat grasses are most desirable, and often the skin bark stripped from the palmetto, or the long leaves of the cat-tail are suitable. When a suitable material for the thread cannot be obtained from the neighborhood, the commercial cane is best used. For the various kinds of baskets many other kinds of vegetable growth can be used; the stems of the maiden hair fern for a rich dark brown thread, the bark and the slender branches of trees such as the cedar, and the red and yellow willow, the splints made from the oak and the ash, and the bark and stems of many vines such as the honey suckle.

The native materials gathered at any time during the year can be used very satisfactorily. However, they are at their best about the time they reach full maturity in the summer. Some are best before maturity and others when the seed is ripe. Study and experience with the available materials are helpful in obtaining the best results. When gathered at maturity the most of these materials are tough and do not become brittle even when thoroly dried out. On account of this pliability it is hardly necessary to dampen when starting a basket, as is necessary with that gathered at other times. The rush gathered at other seasons, as in the springtime, can be used satisfactorily; but it has not the length or toughness of the more mature growth. The children can readily bring in the materials used in their own baskets, or occasional parties can be made up to go out after school hours or on Saturdays. Where it is not feasible to gather the year's supply when the growth is mature, and where there is freezing weather or continued wet spells, enough material should be gathered to last over these seasons. The use of wagons for hauling the material, after it is cut will greatly facilitate this work. Where large baskets are made in any numbers, a great quantity of the material will be required. A class will often use several two-horse wagon loads during the winter and early spring.

It is necessary that the green material be cured, that is dried out, soon after being gathered, else its color will become dark and lifeless, and it will be liable to mold. If made into a basket when green, besides being apt to mold, the necessary shrinking will result in a very loosely built basket when it does dry out. The material can be quickly cured in a few hours if put over warm radiators or in ovens, but after such treatment, altho suitable for building up the sides of a basket, it is rather brittle for starting one. The drying out should be slow. If the storage space will permit, the best plan is to spread the freshly gathered materials on the floor or on racks in a fairly warm room; or if convenient set it out in the sun for a few days. If light is kept from the green materials while being cured a grayish color will result. If the pine needles are put in strong sunlight they will become a rich brown color, but if all light is excluded an ashen gray will be the result. The leaves of the palmetto and cat-tail should be gathered before maturity, and split into the required widths before being allowed to dry. The skin bark from the stems of the palmetto should likewise be peeled off before the stem becomes dry. If the buds of the palmetto are separated

and allowed to dry and bleach in the sun, they can be split with a pin into any desired width.[2]

If no native material for the thread is available it will be necessary to resort to the use of raffia or cane. The cane is imported in bale lots of 100 bundles, each bundle containing 1,000 feet. In the quality of the cane, there are four grades, from the best down as follows: All Long Selected, Extra No. 1, No. 1, and No. 2. For ordinary purposes the No. 1 is very satisfactory. The size or width runs as follows: carriage, superfine, fine fine, fine, narrow medium, medium, common, and binding. For the small baskets the "superfine" is desirable, while for the very large work such as the clothes hamper, or laundry basket, the "common" or "binding" is required. If the cane can be bought in bale lots from the importers in New York City, San Francisco, or other large cities, a great saving can be effected over the retail prices. For instance the "medium narrow," as used in the waste baskets and work baskets, from the importers costs about $40.00 per bale or at the rate of 40 cents per bundle. This from the retailers costs from 60 to 80 cents per bundle. The prices for the same quality of cane from the various retail houses vary greatly. Some importers will furnish a bale made up of assorted sizes as desired at their regular bale prices. The prices at wholesale range from about $25.00 for the narrowest to about $50.00 for the widest size.

Varnish, the last item of maintenance, altho not a positive necessity adds greatly to the appearance and wearing qualities of the basket. It protects it from being soiled, keeps it from molding and preserves and enriches the natural color of the materials.

When raffia, instead of native grasses, is used for the sewing material, the coil, then called the foundation material, is usually completely covered by the raffia. This form is very common in school work when round reed or a heavy cord is used for the coil. For this work there are a variety of stitches in common use such as "Navajo," "Mariposa," "Lazy Squaw," etc. Since these are described in a number of books on basketry, a description of the processes need not be repeated here.[3] The opportunity for design with the use of colored raffia is one of the advantages of this work. The vegetable dyes made from berries, barks,

[2] Tinsley: "Practical and Artistic Basketry."

[3] Worst's "Constructive Work." Tinsley's "Practical and Artistic Basketry." Knapp's "Raffia and Reed Weaving." James' "Indian Basket Making." White's "How to Make Baskets."

leaves, roots, etc., produce most beautiful and harmonious colors. The aniline dyes, such as the "Diamond" dye, are obtained with less trouble, but great care must be taken to secure pleasing harmonies of colors. Excellent suggestions for dyeing with vegetable dyes can be obtained in some of the books on basketry.[4] Raffia comes in several qualities, the price of which varies but little. It is imported in bales of about 220 lbs. made up of hanks from two to five pounds each. The natural color raffia if obtained from the importers costs about 8 cents per pound, but is 15 to 25 cents when purchased at retail. The cost of the colored raffia is much greater than the natural raffia. From the importers in lots of 100 pounds, 10 pounds to a color, it can be obtained at about 25 cents per pound, at retail this will cost from 40 cents to $1.00 per pound.

[4] Worst's "Constructive Work." White's "How to Make Baskets." James' "Indian Basket Making."

II. PROCESSES OF COILED BASKET CONSTRUCTION.

WITH a great variety of materials at hand many baskets involving different processes can be attempted, such as work with braided rush and grasses, the woven work with cat-tail, splints or other flat materials, and the work with the weavers and spokes. However, in order to give very definite directions here, the processes that immediately follow will deal only with the continuous coil baskets. In all of these coil baskets with the use of the various materials the processes are essentially the same. With the exception of the starting the processes are very simple. Briefly they may be divided as follows: first, the starting (the forming of the first circle of the bottom); second, the adding of new strands (to keep the coil uniform in size); third, the regular stitching (which includes the keeping of a uniform space between the stitches); fourth, the adding of a new strand of thread (which requires the tying of a flat knot); fifth, making the turn and building up the sides (according to the required design); sixth, putting in the handles (when necessary); seventh, finishing off the top (the ending up of the last coil); eighth, polishing (the rubbing in of the varnish).

The best problem to begin the teaching of this form of basketry is the flat table mat stitched with silkatine or a fine cord. This is because the flat tying necessary in entering a new strand of the thread material, and the turning up of the side can be eliminated. The attention can then be directed simply to the starting, and the keeping of the size of the coil and spaces between the coils uniform. The use to which the basket is put will of course determine the size and shape, and the size will determine to some extent the materials to be used as well as the size of the coil and the space between the stitches. This regulation of the size of the coil, the spacings, and the stitches requires a very definite training of judgment.

PREPARATION FOR THE STARTING.

In starting a class in this form of basketry clear and positive dictation for the first step is necessary. It is a decided advantage to have this first step mastered by every one in the class. If the material for

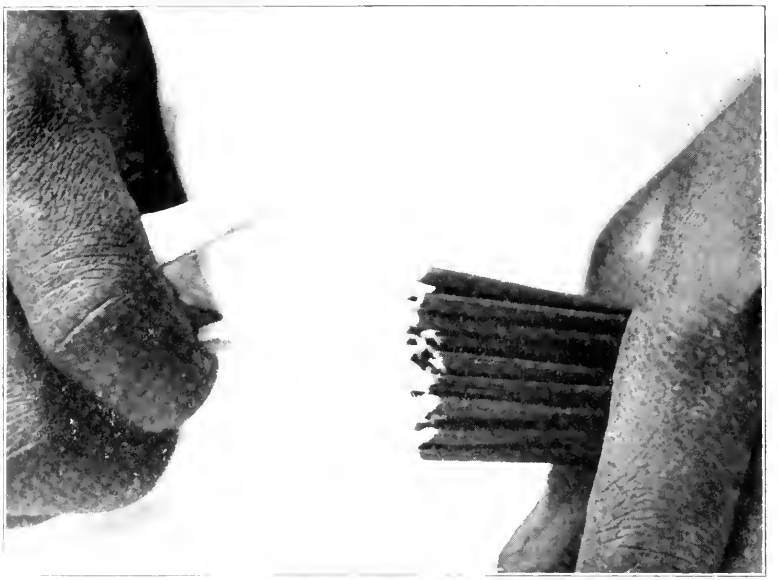


FIG. 1. STARTING THE COIL. NEEDLE AND MATERIAL FOR THREAD IN RIGHT HAND.

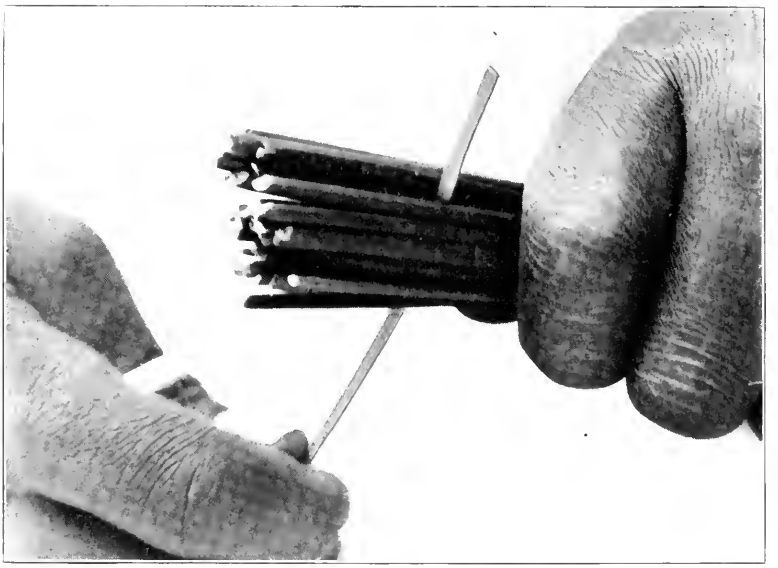


FIG. 2. STARTING THE COIL. END OF THREAD MATERIAL INSERTED BETWEEN STRANDS OF COIL.

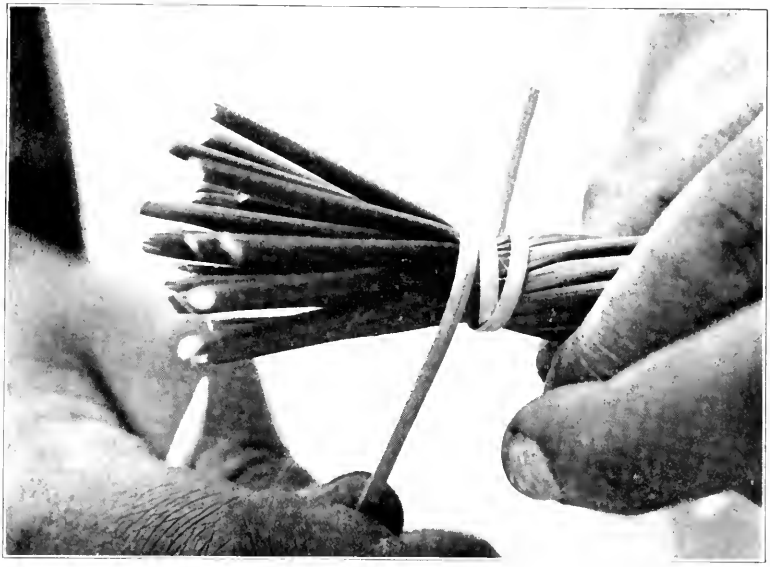


FIG. 3. STARTING THE COIL. THREAD MATERIAL WRAPPED AROUND THE COIL.

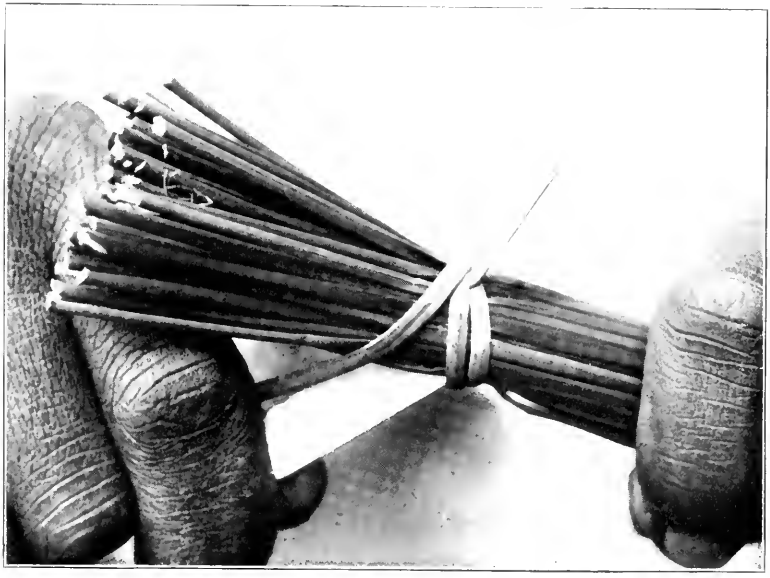


FIG. 4. STARTING THE COIL. POINT OF NEEDLE THRUST THRU THE COIL TO MAKE AN OPENING FOR THE THREAD.

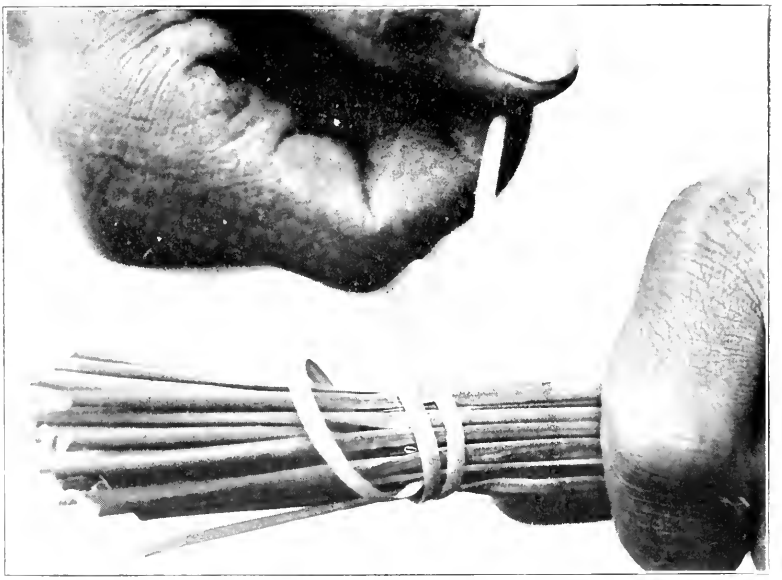


FIG. 5. STARTING THE COIL. SHARPENED END OF THREAD INSERTED IN OPENING MADE BY NEEDLE.

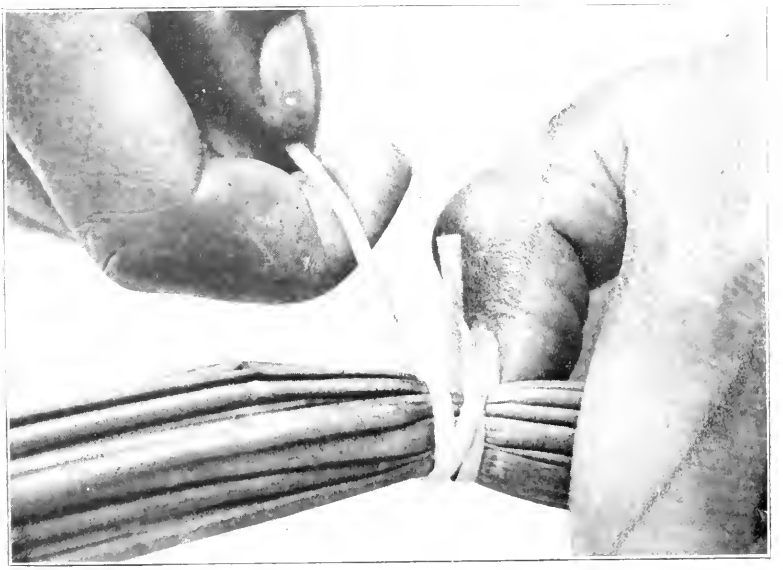


FIG. 6. STARTING THE COIL—THE TIE

the coil is not pliable the strands used to begin the basket must be dampened. If they are stiff and brittle it will be impossible to bend them into a good shape. The number of strands to make up the coil is determined by the size of the basket. A small basket such as the lunch basket, collar box, or table tray will of course require few strands of the material (perhaps a quarter of an inch in diameter), while the large clothes hamper will require a large coil (perhaps three-quarters or one inch in diameter). To start with, and until the first circle is completed, the coil should be less than full size (about two-thirds), else the center will be somewhat hard to round up into good shape.

Hold these strands, suitable for starting, in the left hand with the long free ends pointed away from the worker, as shown in the illustrations. Hold the needle and the material for the thread with one end sharpened in the right hand, as in Fig. 1; now slip the end of the thread, that has not been sharpened, in between the strands of the coil, as in Fig. 2. Then wrap the thread two or three strands around the coil, as in Fig. 3. Three strands around should be used in the large baskets as it makes the coil very much firmer and less liable to come loose when making the first stitches. To make the tie, which is really the first stitch, make an opening for the thread by forcing the point of the needle in thru the middle of the coil. Let the point of the needle protrude from the side of the coil past the loop of thread, as in Fig. 4. In doing this the thread must be kept taut, else it will come apart easily and have to be re-arranged. Put the sharpened point of the thread thru this opening, as in Fig. 5, and pull it up tight, as in Fig. 6. The tie (the first stitch), is now completed. Occasionally a beginner will take this stitch from the wrong direction, backward, as in Fig. 7, which makes it impossible to proceed further until this mistake is corrected.

THE STITCHES TO COMPLETE THE FIRST CIRCLE.

The second stitch is made almost like the first. Force the point of the needle inside the loop of thread at the side of the coil, as in Fig. 8. Put the thread thru this opening and pull it up tight, as in Fig. 9. Notice that the thread is looped around the coil a little distance from the first tie. In pulling it taut a slight curve of the coil is produced. A mistake frequently made is to loop the thread around the coil at a distance too far from the first tie, as in Fig. 10.

The third stitch is made in the same way as the second one. The thread is entered alongside the previous stitch, but in pulling the thread



FIG. 7. THE WRONG WAY TO MAKE THE TIE.



FIG. 8. INSERTING THE NEEDLE.

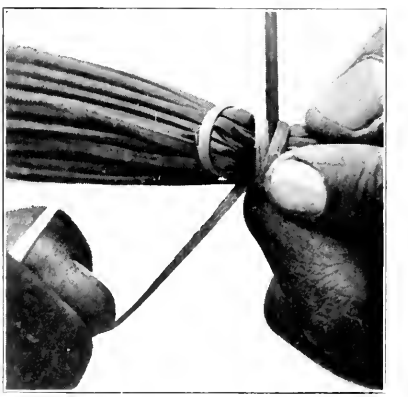


FIG. 9. MAKING THE TIE.



FIG. 10. THE SECOND LOOP OF THE THREAD TOO FAR FROM THE FIRST MAKING THE COIL CURVE TOO ABRUPTLY.

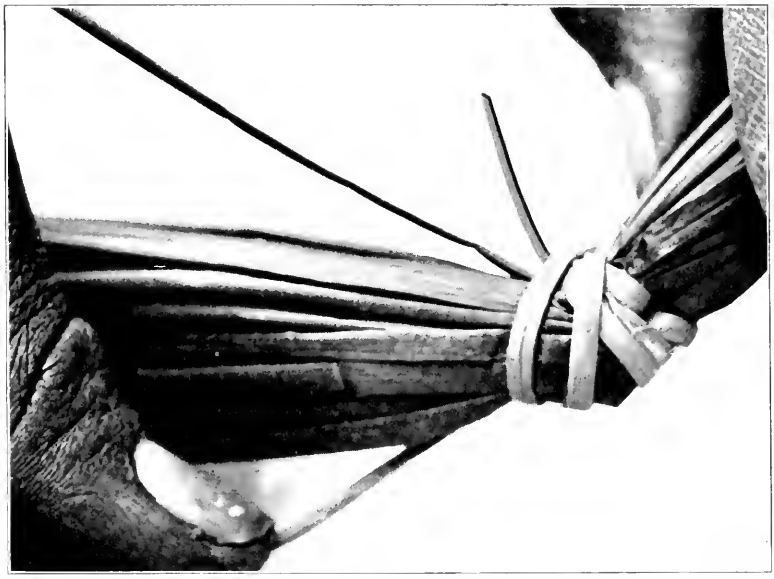


FIG. 11. SHOWING POSITION OF THIRD LOOP IN RELATION TO ONE AND TWO.



FIG. 12. THE FOURTH LOOP AND THE END OF THE COIL TURNED UP.



FIG. 14. NEEDLE IN POSITION TO TAKE LAST STITCH FROM THE CENTER.

up tight it is held with the forefinger, so that it loops itself around the coil a little farther from the second stitch, as in Fig. 11. By pulling and keeping the thread taut the tendency will be to curve the coil around preparatory for the first circle. This curving should be

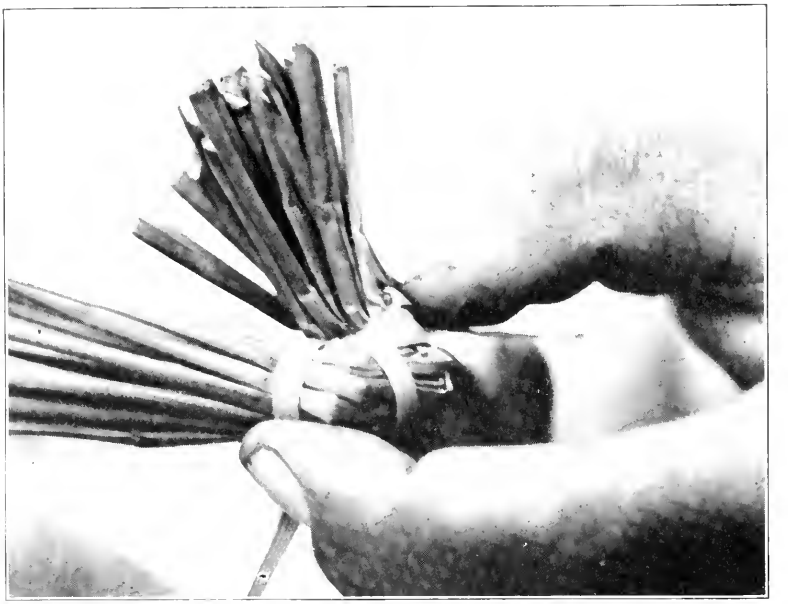


FIG. 13. THE COIL AFTER THE FOURTH STITCH.

helped along somewhat by bending with the fingers. The next stitch is entered alongside of the previous one (this is important) and looped a little farther around on the coil, as can be seen in Fig. 12. The pulling of the thread taut will now tend to bring the short ends of the coil up at right angles with what is to be the bottom surface of the basket. The gradual turning up of these ends can be noticed in Figs. 11 to 15. These ends, the projecting part of which are later cut off even with the bottom surface of the basket, form the very center of the basket as shown in the illustrations. By repeating this stitch six or eight times, always entering each stitch alongside of the previous stitch and always looping each successive stitch a little farther around on the coil from the starting point, the first circle of the basket will be complete. Fig. 13 shows the progress made after the fourth stitch is taken, and Fig. 14 shows the needle in position ready to take the last stitch from the center. Our first step is now completed.

MAKING THE REGULAR STITCHES.

As soon as the first circle is completed it is well to add a few strands to the coil. By continually adding a few strands as the work progresses, the coil should be gradually built up until the desired size is attained, and then continued by adding just enough strands to keep it of an even size.

After completing the first circle the stitches of the second circle will cross to, or be caught upon the adjoining stitches already made in the first circle. Fig. 15 shows the needle in position for the first stitch after leaving the center, and Fig. 16 shows this first stitch pulled up tight. Notice here and in other illustrations how the thread strand crosses the adjoining stitch on the inner circle. This crossing (or catching) avoids any danger of getting loose or slipping. Notice also that the thread is passed not on the outside of the coil but thru the middle of it. This kind of stitch, continued until the basket is completed, is simply made by forcing the point of the needle about midway between the part of the coil adjoining and thru the stitch crossing it, as shown in Figs. 15 and 16. When the second or third stitch of the second circle is made the projecting ends can be trimmed off even with the bottom surface of the basket, as in Fig. 17.

UNIFORM SPACING OF STITCHES.

The space between the stitches will be governed by the size of the basket. Toward the center the stitches will necessarily be close together; but as they radiate from the center, the circle becoming larger, the stitches will get farther apart. Whenever the spaces between the stitches grow wider than they should be, the number of stitches must be increased. If the number of stitches is doubled in the making of one circle around, that is, if an etxra stitch is taken at every regular space between stitches on the inner circle they will be somewhat too close together. An extra stitch taken at every other (alternate) space, for two complete circles only, will double the number of stitches, and at the same time make the spaces more evenly divided. Fig. 18 shows the stitches in the process of being increased. Another half circle around will complete the doubling up process. Since these extra stitches are not caught upon stitches of the inner adjoining circle, the spaces are likely to become uneven. If this happens they must be arranged evenly with the fingers. This process of doubling the number of stitches will have to be repeated a number of times before the bottom is completed.

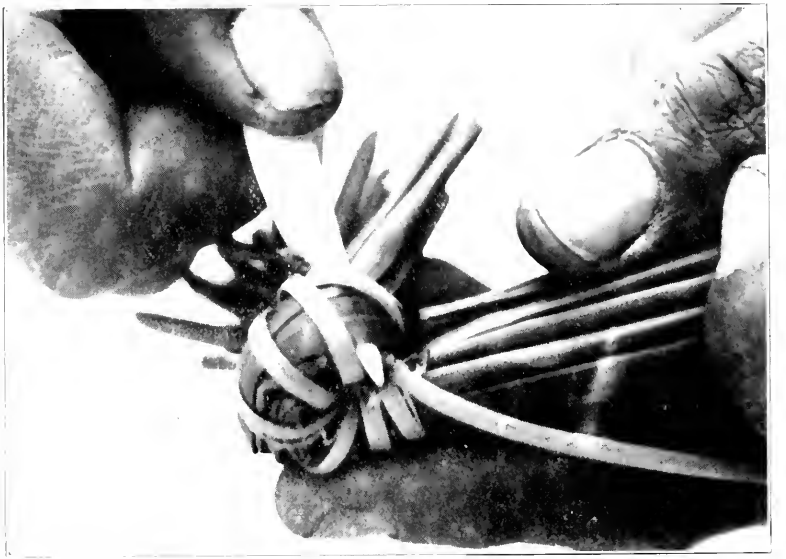


FIG. 15. NEEDLE IN POSITION FOR FIRST STITCH AFTER LEAVING THE CENTER.

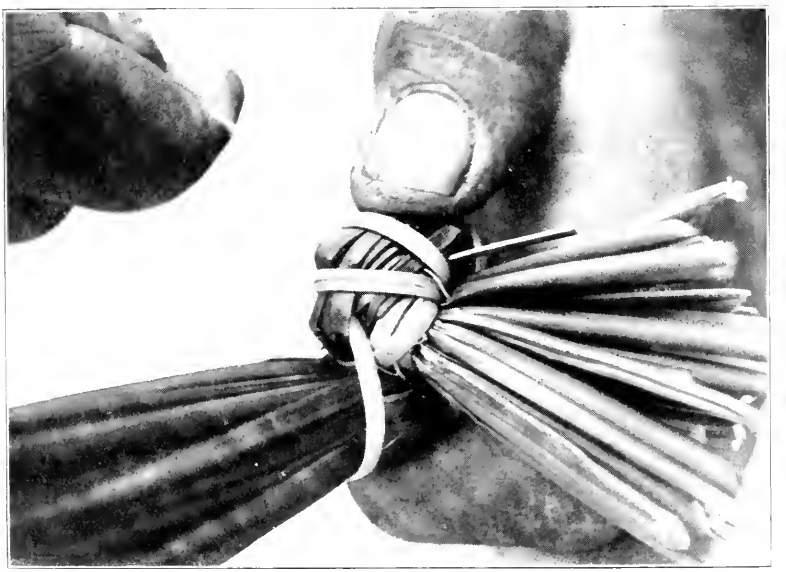


FIG. 16. THE STITCH PULLED UP TIGHT.

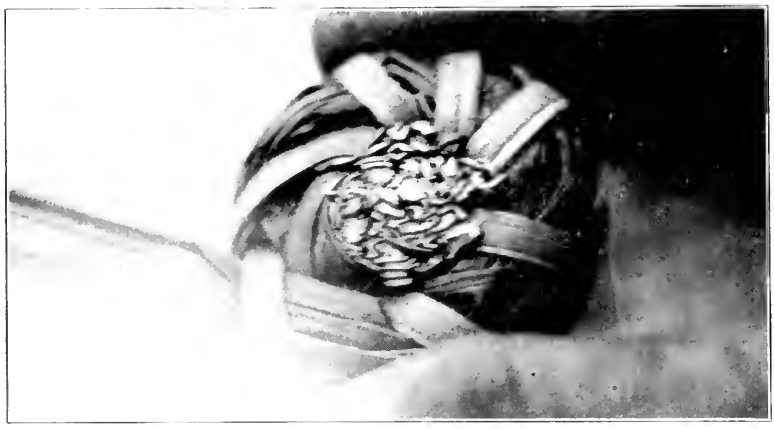


FIG. 17. PROJECTING ENDS AT CENTER TRIMMED OFF EVEN WITH BOTTOM SURFACE OF BASKET.

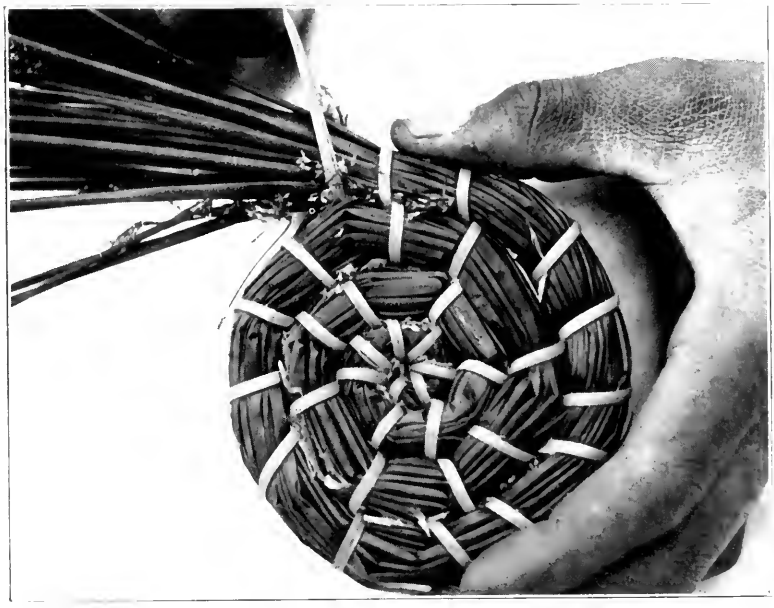


FIG. 18. METHOD OF INSERTING EXTRA STITCHES.

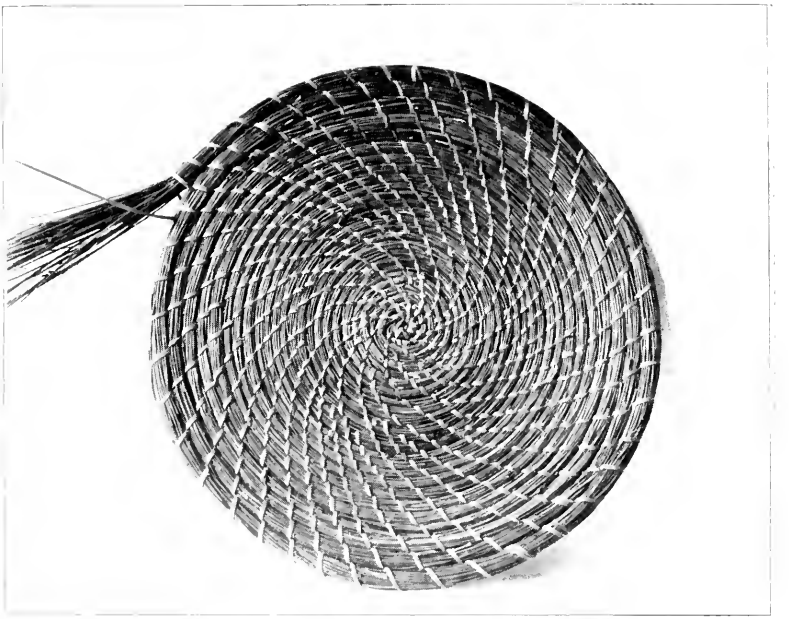


FIG. 19. BOTTOM OF BASKET COMPLETED, SHOWING SPACING OF STITCHES.

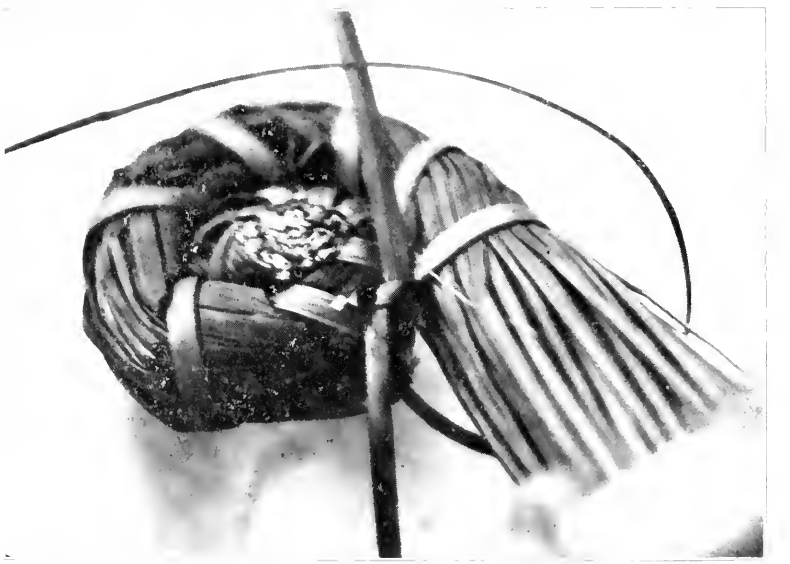


FIG. 20. THE FLAT-LOOP KNOT.

as shown in Fig. 19. Special care must be taken that the spaces between the stitches are very regular and of right width, just before turning up the sides of the basket; for it is this spacing that must continue all the way up the sides of the basket. See Figs. 23 and 24. The thread must be kept drawn taut always if a solid firm basket is to be obtained. If the coils are held in correct position with reference to each other the bottom of the basket can be made perfectly flat.

TYING ON A NEW STRAND OF THREAD.

When entering a new piece of thread a loop knot perfectly flat is desired, as in Fig. 20. This knot is very simply made. The first step of this knot is shown in Fig. 21. The new strand of thread is shown black for the sake of clearness. Slip one end of the new thread thru the middle of the coil next to the last stitch taken. This must cross the stitch of the inner circle as shown in Fig. 21. The short end of this new thread is then slipped under the last stitch taken, on the outer circle as shown. Notice that this free end is pointed away from the free ends of the coil. This end is not pulled up tight but a loop is left formed between the inner and outer circles of the coil. The next step to complete the tie is shown in Fig. 22. First bend back and slip thru this loop the end of the new thread pointing inward. Then the end of the old thread which has been held on the outside of the circle, as seen in Fig. 21, is brought back between the inner and outer circles and entered also thru this loop pointing outward. Fig. 22 shows this done and ready to be pulled up tight. This is done simply by pulling on the long end of the new thread. The result should be a perfectly flat knot as in Fig. 20. With a little care this can be pulled down between the coils so as to be hidden from view.

MAKING THE TURN.

The turning up of the basket is made by holding the coil in the desired position and fastening it there by pulling the thread up tight, as in Fig. 23. Any desired shape can be built up in this way. A perfectly square corner can be made if desired by simply fastening the coil directly on top or at right angles to the bottom of the basket.

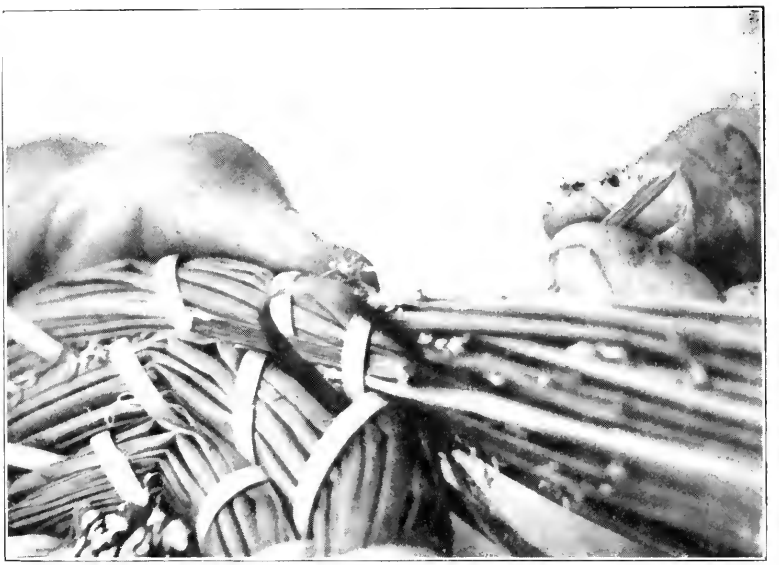


FIG. 21. FIRST STEP IN TYING THE KNOT.

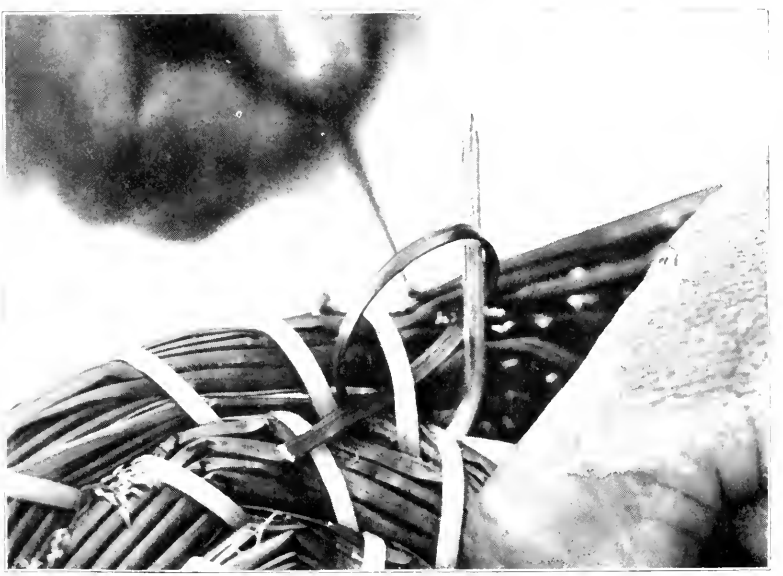


FIG. 22. THE KNOT READY TO BE PULLED UP TIGHT.



FIG. 23. STARTING TO BUILD UP THE SIDE OF THE BASKET.



FIG. 24. BUILDING UP THE SIDE OF THE BASKET.

BUILDING UP THE SIDES.

To secure a good, smooth, even shape to the sides, practice and care are necessary. If the outline is not shaping up in just the desired way, if it is turning in or out too quickly, it is necessary to tear down the few coils that are wrong and then correct to the desired shape. To try to correct it by forcing it into shape without rebuilding the coils that are wrong will result in a badly shaped basket.

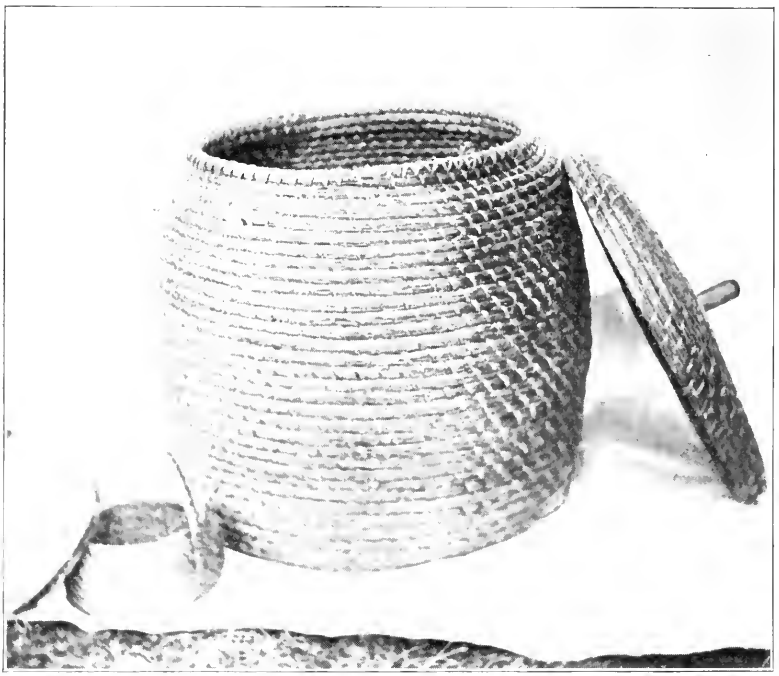


FIG. 25. COMPLETED BASKET.

When handles are needed they must be spliced in where desired when the basket is being built up. They should stand any amount of hard pulling. If great care is not taken they will in time pull out. They must be so well spliced that only by tearing out the coils of the basket will it be possible to loosen them. For the large baskets a rope or heavy cord woven in with the rush running completely around the basket is sometimes desirable.

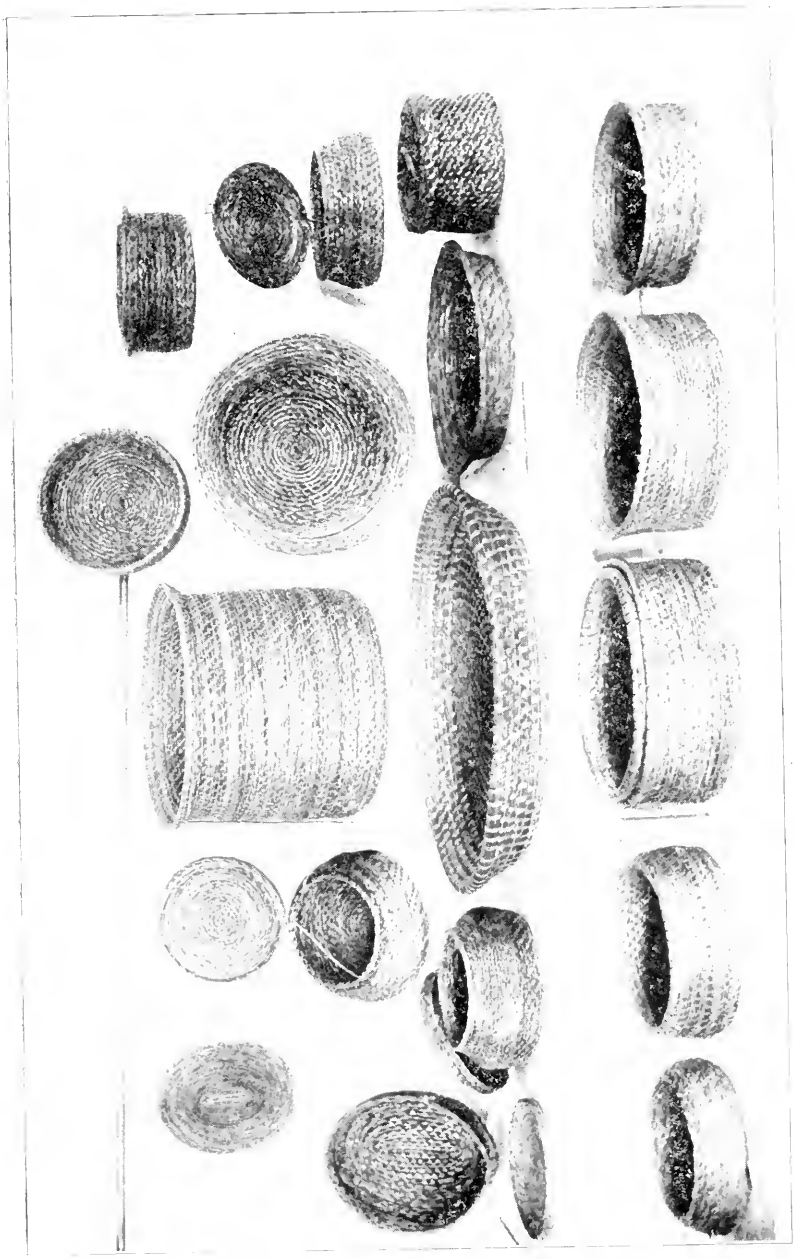


FIG. 26. PROBLEMS FOR THE GRADES: TABLE MAT, SERVING TRAY, COLLAR BOX, WORK BASKET, WASTE BASKET, ETC.

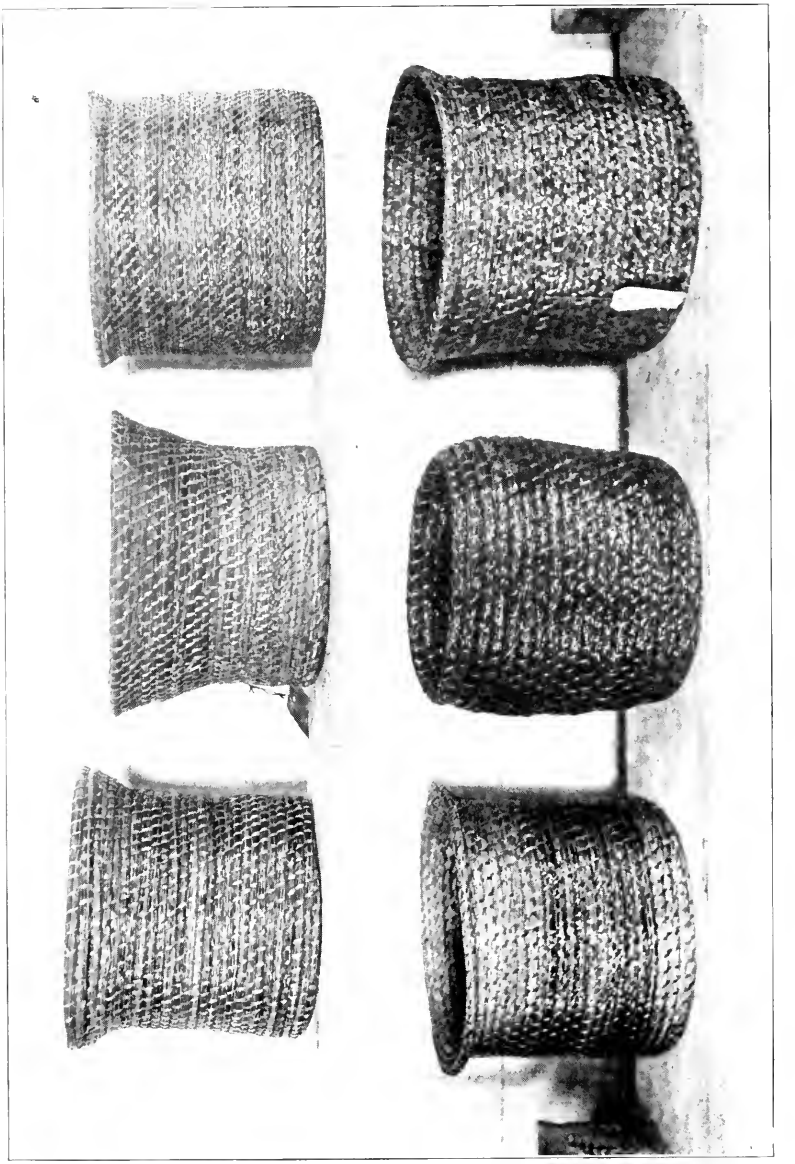


FIG. 27. OFFICE WASTE BASKETS.

When the basket is built up to the desired height simply let the rush run out without entering any new strands, and the top will be finished level. It is well to reinforce the top with a double stitch. This is made by running an extra circle of stitches all the way around, backwards,



FIG. 28. PART OF WORK OF ONE SCHOOL, THIRD TO SIXTH YEAR.

that is in the direction opposite to that in which the basket was stitched up. This double stitch can be seen clearly in Fig. 25. The last end of the thread is fastened by simply running the thread back in and out again several times close to where the last stitch was taken. This makes a very secure tie.

The polishing is the rubbing in with a stiff brush of one or two coats of ordinary varnish. Altho this is not necessary it is very desirable because it increases the strength and serviceability as well as greatly enhances the appearance of the basket.

III. OUTLINE.

Coiled Basket Work.

I. Problem for grades.

Third Grade.
1. Table Mat. Fig. 26.
2. Tray for carrying glasses. Fig. 26.

Fourth Grade.
1. Work Basket. Fig. 26.
2. Collar Basket or Box with lid. Fig. 26.
3. Nut Holder. Fig. 26. (Supplementary.)
4. Fruit Tray. Fig. 26. (Supplementary.)
5. Serving Tray. Fig. 26.

Fifth Grade.
1. Trash Basket. Figs. 26, 27.
2. Collar Box. Fig. 26.
3. Jardiniere. Fig. 26. (Supplementary.)
4. Paper Basket for desk. Fig. 26. (Supplementary.)

Sixth Grade.
1. Laundry Hamper for soiled clothes. Fig. 25.
2. Trinket or Jewelry Basket. Fig. 26. (Supplementary.)
3. Collar Box. Fig. 26. (Supplementary.)
4. Lunch Basket. Fig. 25. (Supplementary.)
5. Hanging Flower Basket. (Supplementary.)

II. Sizes of Problems.

1. Clothes Hamper or Laundry Basket. 18″x20″ diam., 24″x26″ high—large coil.
2. Work Basket. 9″x10″ diam., 3″x3½″ high—medium coil.
3. Fruit Tray. 10″x12″ diam., 1½″ high—medium coil.
4. Trash or Waste-Paper Basket. 10″x11″ diam., 12″x13″ high—medium coil.
5. Serving Tray. 14″x15″ diam., 1″x1½″ high—medium coil.
6. Desk Basket. 8″x9″ diam., 5″x6″ high—medium coil.
7. Table Mat. 6″x12″ diam.,—fine coil.
8. Tray for carrying glasses. 6″x7″ diam., ¼″x½″ high—fine coil.
9. Trinket or Jewelry Basket. 5″x6″ diam., 2½″x3″ high—fine coil.

10. Collar Box with lid. 6″x7″ diam., 3″x4″ high—fine coil.
11. Lunch Basket with lid. 7″x8″ diam., 4″x5″ high—fine coil.
12. Collection Basket. 7″x8″ diam., 2″x2½″ high—fine coil.

III. Sizes of details and materials.

1. Spacing.

   About 1″ space between stitches with large coil.
   About ¾″ space between stitches with medium coil.
   About ⅜″ or ½″ space between stitches with fine coil.
   The size of the coil will regulate the space between the stitches.

2. Coils.

   Large coils about ⅝″ or ¾″ diameter.
   Medium coils about ⅜″ or ½″ diameter.
   Fine coils about ¼″ or 5/16″ diameter.

3. Materials.

   Use binding cane or material of similar strength with large coils.
   Use medium narrow cane or material of similar strength with medium coil.
   Use superfine cane or silkatine with fine coils.

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