

A NEW ART INDUSTRY MAY GROW FROM THE POTTERY WORK OF THE HANDICRAFT GUILD

By MARTHA SCOTT ANDERSON.

—PHOTOS BY A. S. WILLIAMS.

WITH the putting of the first pieces of their wares on the market last month the Handicraft Guild has just launched a new industry whose future has great and interesting possibilities. For a year the guild has been teaching pottery-making and some admirable pieces have been made by the pupils, especially in the summer

ment for the guild of doing a sample lot of pieces for the market. The equipment was ready and the leisure season of school work made the time a favorable one. Some carefully made moulds of pleasing shapes were left by pupils of the school and these have been utilized. The mould is simply used as a quick means of giving the first shape to the pottery, the finishing and decorating being done wholly by hand, as the pieces are turned out of the moulds in

craftsmen whose other special forte is metal work.

The Pottery Experimenters.

The work now going on in the clay department is being directed by Miss Florence Wales, who resigned from the public school corps, where she was assistant art supervisor, to devote her time to the work of the guild. The first guild pottery marked with its characteristic monogram has been made by Miss Wales, Misses Margaret Hubbard,

ingroom, equipped with half a dozen potters' wheels on which the thrown pieces and moulds are made. A number of small rooms are used for glazing, moulding and the storage of both materials and pieces dried ready for the kiln. In the old and roomy woodshed a large kiln is the chief piece of furniture. This is built in and beside it is a small portable kiln, while the walls are lined with shelves on which is usually an interesting array of forms, both fired and unfired, successful and unsuccessful.

The three processes of pottery making are hand building, throwing and moulding. All were taught in the guild school this summer. The same material is used for all the processes, the only difference being in the consistency of the clay. In hand building the clay is stiffer—about like that used by sculptors or by the children in school.

Preparing the Clay.

The clay used thus far has been the Red Wing article just as it is received from the clay beds, and it has proved so admirable a base for glazes that it is likely to be used with little modification, although experiments with it in combination are planned. The boy prepares the clay for the potters by breaking the lumps, sifting it, moistening it, and kneading it smooth, before forming it into bricks of the desired size and shape. The clay used in moulding is mixed in a churn with water, half and half and the "slip," as it is called, is about as thick as cream and pours readily. The slip is used also for the glazes, with the addition of the various colorings. The glazes all look so much like the things they have to be kept carefully labeled and great care must be exercised not to get pieces mixed up in the glazing or there would be wholly unexpected and perhaps not pleasing combinations resulting from putting on two or three coats of glaze of different colors.

Work from Drawings.

Before making a piece a working drawing, full size, is made and the work is tested at every stage by measuring with the drawing. The tools used are few and simple—boxwood sticks with pointed or spatula-shaped ends, thin disks of flexible steel of various shapes and a small, hoe-shaped instrument for use at the wheel. With these the inequalities of the surface are smoothed and sections removed and smoothed up is done by wetting the clay with a sponge and rubbing with fingers and thumbs. Sand paper is also used in giving a smooth finish.

When the modelling and surface finishing is completed the pieces are dried thoroughly before firing. Green clay can be glazed and given two or three firings, but at the guild all the pieces are fired in the biscuit stage, that is, once after this firing. The first firing does not require so great a degree of heat as for firing the glaze, but by putting the biscuit pieces in the kiln for a long time, a convenient and economical plan. About sixty pieces of average size can be stacked in the large kiln.

The Red Wing clay requires a rather high degree of heat. In order to tell when the heat is sufficient, little cones of various sizes, melting at different degrees of heat, are used. These are put in the kiln where they can be seen from the peepholes in the door that command views of the shelves on which the pieces are usually stacked. When the test cones drop over, the fire is turned off and the kiln is allowed to cool. It retains its heat, the pieces are kept at the fusing point for a long time. The glaze melts and amalgamates with the pottery of the body and is thoroughly blended, making a beautiful even surface if the glaze is well done. Ordinarily, but one firing in the glaze is necessary, but if there are any defects, fresh glaze can be added and the piece given another firing. Sometimes some part of the kiln does not get hot enough to complete the work of melting the glaze and the pieces in it have to go thru the fire again.

As the glaze dripping off the sides would form a thick base at the bottom if the pieces were put right on the floor or shelves of the kiln, each piece is sup-

ported by a little three-pronged holder or "still" of freclay. This lets the superfluous glaze drip off harmlessly and prevents the piece from sticking. Sometimes the stills stick, but they can be readily broken off. The rough edges left at the bottom are ground down on the emery wheel.

Throwing Requires Dexterity.

"Throwing" is the technical name of making pieces on the wheel. For this

ing process is a rapid one, but it is difficult to acquire dexterity and accuracy, for a little slip spoils a piece and the work has to be done over.

At present, the wheels are run by footpower, sewing machine frames and treadles being used. This makes the work a little heavy and it requires more skill to work with both hands and feet at once; for this reason the throwing, in spite of its great fascination, is likely to lag somewhat until power can be provided.

The plaster drinks up water greedily, and this is the secret of the use of the moulds. The soft slip is poured into the moulds and shaken around and clings evenly to the sides. As soon as enough has adhered to make a piece of the desired thickness, the rest is poured out and the clay is permitted to dry. As it dries it shrinks and loosens from the sides, and is readily turned out. It is removed while still quite soft and is sufficiently plastic to be readily workable for the finishing. A good many shapes have to be cast



CLASS AT WORK HAND BUILDING AND FINISHING.

school, but the founders of the guild were not satisfied until they undertook a test of the clay and of this section as a field for the manufacture of art pottery.

The success of the work done in the summer school under the skilled supervision of Miss Florence B. Willets of the Art Institute of Chicago, was so encouraging that several of the pupils were eager to make the experi-

ment, sufficiently plastic to be readily worked over by hand.

Miss Willets left at the close of the school term, but every effort is being made to induce her to return to Minneapolis and become a permanent member of the guild. She is not only a thoroughly competent teacher and maker of pottery, which she has taught at the Chicago Art Institute as the assistant of James Webb, who was her instructor, but she is an all around artist

Jeannette Gunckel, Katherine Whitney and Annette Wales.

The whole rear portion of the guild building, the old King homestead, is given over to the clayworkers and during the school this was found very crowded. The old pantry is used as a dryingroom and the generous refrigerator now keeps moist bricks of soft clay and pieces upon which work is not completed. One large room is used for the handbuilding and finishing of the soft clay. Adjoining this is the throw-



MAKING THROWN POTTERY.

OLD MINNETONKA TALE REPLETE WITH THRILLS

WITH the avowed declaration that nothing but "truth" is to be found in its pages, the Wide World Magazine, of London, Eng., for August, prints as the leading story, "A Human Tiller Rope," by Captain C. A. Zimmerman, commodore of the Lake Minnetonka Navigation company. Merely truth in a London magazine is rarer than fiction. Even the editorial note at the head of the article says that it is a story probably written at parallel in the history of steamships. "An act of heroism performed under most extraordinary circumstances, showing how the pluck and endurance of one man averted a terrible disaster."

"That man was Captain Johnson, who, in 1887, rode the decks of the Belle Minnetonka as first officer. Some say remember the day when Captain Johnson formed the human splice in the tiller rope. Few, however, have heard an entire story told in the words of an eyewitness. With a few broad strokes of a pen, Captain Johnson is drawn as a giant in stature, and a veritable Samson in strength—a man who risen from deckhand to master as a natural and just reward of merit and ability. Like most strong men he as the son of good nature."

Next, various points of interest are mentioned, Lotus Bay, Cook's Bay, ane Island, and Hardscrabble and Star Point reefs. When the boat swung away for Enchanted Island, a white-and-red flag, marking a dangerous reef, appeared on the port side.

"The jagged rocks it guarded were barely visible, and as it snapped and fluttered in the east wind, it seemed to plead there to add color and interest to the scene, or for the amusement of the younger tourists, who gazed in glee at the pretty red flag in the mud. It did not seem to be so, as it did to the pilot and

steering gear, and—oh, horror!—in apparently imminent danger of dismemberment.

"It was very plain to me how it all came about. Rushing to the seat of the trouble from his post forward, quick to see and as prompt to act, without regarding the possible consequences to himself, the captain had vaulted upon the huge wooden arm, and hurriedly winding the free ends of the broken half-inch cable about his arms, he had made a desperate and frantic effort to quickly bring them together and reunite them.

"The anxious pilot aloft—with the danger to his ship and passengers clearly before his eyes—felt the accustomed strain once more upon the wheel, fancied the repair had been made, and was now bringing it "hard over" to clear the deadly reef so close alongside. In doing this, of course, he employed a tremendous strain over a straight pull upon his victim."

"Captain Johnson" also immediately recognized that the holding on to the loose ends might mean death to him, but life to the passengers. "Drawing a deep breath and clenching his teeth, he nerved himself for the terrible ordeal he felt sure was coming. In vain were scores of hands outstretched towards the heroic, suffering sailor in midair, but none dared or could touch him for fear of balking the effort, and an ominous silence such as accompanies all suppressed emotion settled upon the little group while, under the pilot's hands, the great steamer made her way, foot by foot, past the reef.

"The captain was all exhausted when I appeared on the scene. The terrible strain upon his superb frame caused the veins of his head and neck to stand out like the veritable cords of steel he was contending with, and his face streamed with perspiration.

"Scarcely conscious, the brave fellow did not apparently hear or need my

hasty injunction to 'try and hold her for a second longer,' delivered as I sped heading away from the paralyzed group to the foot-box of the chief engineer, up whose trumpet I shouted frantically to Pilot West, 'Steer her by the bells; you are pulling a man in two!'

Grazes the Reef.

"At once my hurried exclamation caused the bells to renew their clamor, and my eyes glanced anxiously forward. The bow fairly reared past distant familiar marks, and altho the reef flag was struck down and disappeared with a swish under the guards and we could plainly hear, as well as feel, the rumbling of the 'nigger heads' that bordered the reef as the vessel's starboard knuckle grazed them, I knew that the danger was passed. The mar-



"UPON HIS NERVE AND ENDURANCE DEPENDED THE SHIP'S SAFETY."



THE FINISHED PRODUCT.

Making a Plaster Mould.

The moulds used are of plaster of paris and are made on the wheels. The core is shaped like the clay, except that the form is solid and is made bottom side up. When the desired form is completed, it is allowed to dry and a heavy piece of oilcloth is bound around the edge of the wheel. The dry core is scaped to prevent sticking, and more plaster of paris is poured around it. The core and mould separate readily when dry.



FILLING THE MOULDS WITH SLIP.

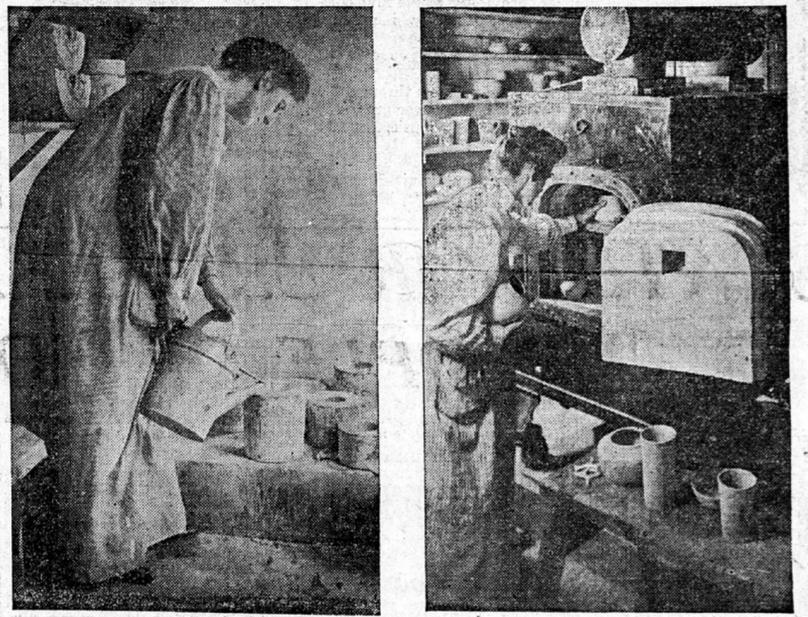
Two Pieces and Joined.

This is done so perfectly that it cannot be detected. All handles are built separately and joined, while spouts, crimps in the edges and the like, are made by skilful pinching of the soft clay.

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THE FIRING ROOM AND KILNS.

FURNACE TEST SOON TO BE MADE OF CROW WING ORES

Future of the So-Called Cuyuna Iron Range Near Brainerd at Stake—Progress of the Operations to Date.

Special to The Journal. Brainerd, Minn., Aug. 26.—In Crow Wing county, of which Brainerd is the seat, are newly discovered beds of iron ore, now known as the Cuyuna range. Actual mining operations have been started in township 45, range 29, about two miles east of Jonsville, and not more than eight miles from the city limits of Brainerd.

The operations are being conducted by Pickands & Mather, a Cleveland corporation, locally organized under the name of the Hobart Iron company. About two weeks ago they moved in with a crew of some twenty men, set up tents in the woods, built barns and other buildings, and at once commenced work on a shaft, working day and night shifts.

All that can be done by drill tests and assays has already been done. The plan now is to ret the mine into working shape as soon as possible, have a spur constructed from the Duluth branch of the Northern Pacific, which passes about a mile and a quarter east of the forty on which the shaft is located, and thus ship the ore as soon as obtained. Should the furnace test, which is the final commercial test, prove an entire contradiction of the assays, it is probable the mines would yet be abandoned. But the company certainly

expects no such results, but rather to be taking out a thousand tons of ore a day in a few weeks.

Shaft Near Oat Field.

The shaft is 10x12 feet, and is on the edge of a swamp just as it rises into the oat field, the garnered oats showing how lately the land has been a farm. The shaft was sunk last week to a depth of sixty or sixty-five feet. Drill tests showed iron ore at eighty. At this point operations had to be temporarily suspended by reason of the rise of water in the shaft, the machinery then on hand being insufficient to cope with it. A steam pump had been ordered, and within a week the work will commence again.

Facts Concerning Deposits.

The facts obtainable in regard to the mineral deposits are these: The range has its beginning northeast of Deerwood, a small summer resort about midway between Brainerd and Aitkin. From there it runs in a general southwesterly direction for about eighteen miles to the old Swartz driving park, east of Brainerd. It passes thru a stretch of country varying from fields or woods to marsh. None of it can be called really hilly. In no place along the whole range are there outcroppings, and pieces of float material are rare.

The vein itself as shown by dip needle declination and drill tests is what is known as a verticle, at its nearest point, about seventy-five feet below the surface and concealed between two walls of black rock, the upper one sometimes as much as thirty feet in thickness. The formation is peculiar, differing entirely from the deposits of the Mesaba range, which occur in patches at varying depths below the surface, and often exhibiting surface outcroppings. It is said to be more like that of the Gogebic range in Michigan than any other known deposit. The belt averages about 175 feet in width, running from considerably more than that to a mere point, and in places reaches a depth of 300 feet.

Soo May Build In.

An important business movement indirectly connected with the developing mining interests in the county is the projected plan of the Soo railway to build a line to Brainerd. Investigations have already been made in the Mille Lacs country with a view to locating a townsite near Mille Lacs lake, and representatives of the line are expected in Brainerd to go over a part of the ground and study the business conditions and mineral outlook more thoroughly.

The project under consideration contemplates tapping the main line of the Soo at Kimball Prairie, running from there north to St. Cloud, thence on northeast to Mille Lacs, striking the lake at some point along its southwest shore, and thence east into Brainerd, with a freight spur running north into the country around Jonsville and Deerwood, where the mining operations are being carried on. The first options on the land were taken about two years ago. Piece after piece was contracted for with farmers and outside owners until the whole range, except a few scattered pieces, has been brought under the control of the mining interests. Property along the line of the vein has risen from \$15 an acre to ten times that amount.