

TRADES AND CRAFTS IN THE OLD SPANISH MISSIONS.

BY E. T. MILLS.

Looking back at the work accomplished by the fathers of the old Spanish missions, one is deeply impressed with the extensive and rapid progress that they made, as well as by the wide learning which they were enabled to transmit to the races about them.

The wilderness was conquered in weeks. Great trees were torn from the mountain-tops to aid in building spacious halls and corridors which have withstood the tide of more than a hundred years. Agriculture and mining flourished side by side with manufacture and trades of all descriptions and kinds.

Religious and other training was speedily introduced. An unlettered, unenlightened, foreign people were subdued and taught all the arts of the enlightened, well-schooled peoples of European countries. And all this was done in a miraculously short period of time. More than that, the work accomplished by these pioneers of Western civilization, as shown by the relics from their workshops now in existence, is of superior quality to that which may be found in many factories of the present day.

Each priest that came to this country was a master mechanic; he knew something of all trades and much of many. He taught the Indians, and as soon as one became proficient, he in turn communicated his knowledge to the others. By so doing there was spread among the people the greatest amount of learning in the shortest space of time. The Indians, like the Chinese, were apt in imitation. They picked up the trades easily, and were flattered into perfect work-

manship by becoming so soon the instructors of their fellows.

This time has been called "the Golden Age of California." Then everyone was happy because everyone was busy, and yet no one was overworked. Labor began usually at 5 A. M. after the morning angelus and breakfast. Rest, coming at 11 A. M., when the

Much of the work of the earlier periods was done within the *cuadrado*, or great square court of the mission, where the workman and his tools could be safe from theft and invasion. Later there were houses built for the trades people and their work on the outside. The ruins of these are still remaining in some places—ruined gristmills and old tanneries, which are picturesque features of these ancient times and furnish additional pages to the history of the occupations of the age.

Each mission was expected to be able not only to carry on all trades, but also to manufacture the tools with which that trade was carried on. To a certain extent tools were brought from Spain and from Mexico, yet in the main the missions were self-sustaining and provided every article for their own consumption and use. They were, moreover, specially renowned for certain trades and famous for certain articles manufactured.

From well-authenticated records San Fernando Mission comes down to us as being especially skillful in handling iron. Before the flaming forge the men of this mission stood day by day and made the anvil ring and the sparks fly. They taught the Indians to make chains; and so expert did their pupils become, that it was impossible to tell which was the original and which the copied article.

From their shops were turned the clever bear-traps that enabled them to protect the mission herds from all wild beasts. Hammers, pulleys, flatirons, scissors, plowshares, scales for measuring gold and scales for measuring rations—all of these and many more are now remaining in well-preserved relics. The friars of this mission were most adroit in the making of nails.



SANTA YNEZ MISSION.

noon meal was served, continued until 2 P. M. Everyone was allowed complete relaxation during this period. From 2 to 5 work was resumed, then supper, often eaten in the open air, and after the evening angelus there was time for recreation, for dancing and games, until 7.30 P. M., when all retired within the mission to peaceful and well-protected slumbers.

The mission buildings themselves constituted the whole city. They were the fortress, the church, the state, the school, and the seat of all industrial learning and technical training. They were built in a rectangular form inclosing a square, or *cuadrado*, which furnished an impregnable fortress in time of war and gave ample space for community gatherings.



BLACKSMITH—OLD SPANISH MISSION.



SANTA BARBARA MISSION TAILORS.



RUIN OF AN OLD TANNERY.



A FRIAR GARDENER AT WORK.

These, while made by hand, were cleverly turned, pointed at the end very much more than are the nails now made, and fixed with a sort of hook-like point, so as to enable them to clinch more securely than they would if blunt. It was necessary that the nails that held their great wooden double doors together should be well made and durable.

An old cowbell is still on exhibition, which possesses a singularly sweet quality of tone. At evening time this musical monitor led the herds home and sounded well to the ears of the expectant herdsman. In the same collection are found also iron bands that held the hubs intact for those great clumsy vehicles used as wagons. These vehicles were called *carreta*. Bits of almost all tools that are still used are to be seen there also in the famous collection made by Don Antonio Coronel, of the city of Los Angeles, and which is now located in the Chamber of Commerce.

Notwithstanding the lack of proper implements for working iron, and in spite of poor facilities for getting perfectly gaged heat and other requirements, the workmanship in these is excellent. It is done as well as that of our modern iron workers. One who visited the collection recently said: "This iron is as good as any workman in my shop can turn out now."

San Fernando was famous also for the inlaying of iron with silver, which was used largely in the decoration of bits and bridles. The effect of these shining turnouts upon a prancing horse, tossing his head, and with every movement sending out streams of light, can be imagined when, on the feast days and celebrations, hundreds of gayly-dressed caballeros and senoritas were gathered for a good time and display.

The form of decoration which was used on the bridles was that of the *concha*, or shell. This was used sometimes also on the saddles, though quite as frequently these were almost covered with Mexican dollars, never American. The places that were not so covered were many times beautifully carved in leather. Santa Ynez Mission was famous for the making of these fine saddles and for the most beautiful work in the preparation of the leather as well as for its decoration in clever hand carving. Among the descendants of old Spanish families now living in Southern California there are a number who still retain possession of some of these old saddles and some of the old leather work also. Upon these there is a valuation placed that exceeds that of any similar work now done, however excellent that work may be.

Special aptitude and individual talent made these two missions famous for iron and saddlery; but soil and climate, undoubtedly, had more effect in producing the excellence of wine manufactured in San Gabriel. Tons and tons of vintage were yearly turned out from this famous wine-growing section. It is still giving a goodly yield, with fertile valleys, vineyard-covered, stretching away for miles in the yellow sunshine. As San Fernando was in the closest proximity, there is also the same reason for the success of that mission in brandy making, or *aguardiente*, literally fire-water, as it was then called.

The Indians were especially interested in their work for the church and in houses to be occupied by the padres. They loved the fathers with all the reverence of their childlike natures, and devoted the utmost affection to the service they gave them.

They felled the great trees on the mountains about and brought them down as rafters for the missions and other buildings. The trade of stone cutting also was easily taken up by them, from their familiarity with the making of stone implements used in earlier times. No service was too great, no stone too heavy for them to carry, in the beloved labor.

In the churches are still some remarkable relics of fresco work done by them, which possesses considerable delicacy and beauty. Their wood carving for benches, confessionals, pulpits and chairs is beautiful. There is still one handsome old hand-carved chair in

San Diego, one in San Juan Capistrano, and another at San Gabriel Mission.

The trade of the coppersmith was not unknown to them. The copper bowls which they made were finished with handsome decorations around the tops in *repoussé*, and were used on the altars and in the niches of the churches for holy water. Cement work done in the mission buildings themselves is of such remarkable character as to outwear even the stone which it holds in place. It is harder than flint at the end of more than one hundred and thirty years. Nor



SHOEMAKER OF THE FRANCISCAN ORDER WORKING AT HIS TRADE.

should the work of the Indian women be omitted. They became, under the guidance of the weavers and menders of the mission, very skillful in this work. They were also easily led from the art of basketry to that of Mexican drawn work. In this they gave ample scope to that peculiar form of imagination which is shown in the kindred art of their former years. With what patience did they work upon the beautiful pieces in pure white linen for the altar cloths and holy habiliments of the church and ministry!

San Antonio was justly celebrated for the manufacture of flour, San Luis Obispo for tiles, and San Solano, the farthest north of all the missions, for feather work. Every trade seems to have received a proper degree of attention, although some in certain kinds of work excelled all others. This success gave an impetus to the work of that institution and brought it into favor with the home country.

Notwithstanding all, there came a time when the friars were to be recalled. The secularization of the missions withdrew the Franciscans to Mexico; and



FEEDING A 26-FOOT PYTHON.

now by a curious similitude the fate of the exiles from California is reversed, and those in Mexico are again exiled to California. They are returning and establishing schools in Los Angeles, at San Gabriel, and other places.

At the time of the first secularization all of the California missions responded to the call and abandoned the mission buildings, except Santa Barbara. There throughout the whole time the regular service has been maintained. Every morning and every eve-

ning such distinct ritual orders were observed as to keep up the form of the Franciscan mission work.

And there, at the present day, the faithful friar gardener still attends the flowers, fruits and vegetables, still turns the fertile soil with his miniature plow, and gathers the fruits of his labor at the time of the harvest. The members of this order are the most faithful adherents of the ministry of physical work; labor to them is a part of religion. They do not, however, at present abjure every form of comfort in life and walk about without shoes. In personal

appearance they are not even recognized hardly as priests among the people of the thoroughfare, for they dress in citizens' clothing when abroad, on most occasions.

At the missions, though, in regulation robe and cord they work at their trades. The shoemaker sits at his bench with tools and leather and patiently patches, cuts out, and sews on the work before him. In the tailor shops priests are engaged in cutting, fitting and pressing garments worn by the order. They are, however, aided in this day by the sewing machine, with which the old-time mission tailors were not assisted. At the forge still stands the priest blacksmith, just as he did more than one hundred years long gone. The bellows respond as promptly to his touch, the anvil rings out as clear, and the sparks fly up just as they did for his illustrious predecessors. Time has not materially changed the situation. The ruddy flame lights up a face with dress and gown almost identical with the past.

Soon after a passenger train from Otley to Leeds had left the former station, the engine collapsed and brought the train to a standstill, says the Mechanical Engineer. An enormous rush of steam, after the train had traveled about a quarter of a mile, caused the driver to discover that something was wrong. He immediately applied the brakes, and brought the train up in about 100 yards. It was then found that the connecting rod had smashed, and penetrated the under part of the boiler, ripping it open. At the time of the accident the engine was traveling reversed. Had it been going the ordinary way, in all probability the engineman and fireman would have been very seriously injured. As it was, the former was seriously scalded about the legs.

FEEDING A 26-FOOT PYTHON.

There are twenty-five genera of the boa family, the most important of which are the two species known as the pythons. They are of great size, some of them attaining a length of 30 feet, and are noted, usually, for their voracious appetite, but occasionally this appetite fails and drastic measures must be employed. Some time ago the New York Zoological Society secured a 26-foot python, which was placed in the reptile house. It absolutely refused to eat anything, and while it is possible for a snake to refrain from food for a considerable period there is an end even to the endurance of a snake. As there seemed to be no inclination on the part of the snake to save itself from starvation, the authorities decided that extreme measures must be taken. The food, which consisted of two rabbits and four guinea pigs, was prepared. The animals were fastened to the end of a long pole. The snake was firmly grasped by twelve men and brought out in the center of the reptile house. Its mouth

was opened and the food was pushed into it by the aid of the pole. The snake made violent efforts to break away, and it was only by the combined efforts of the men that he was held quiet enough to allow the gas-rotomical operation to be performed. He was then put back into the cage to allow the processes of digestion to resume.

A scheme is on foot to provide an elevated railroad for St. Louis.