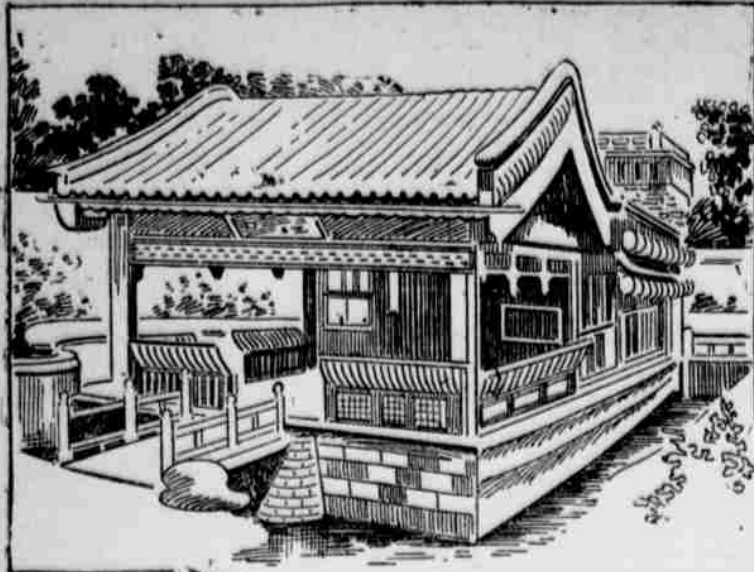


View of the Imperial Palace at Pekin.



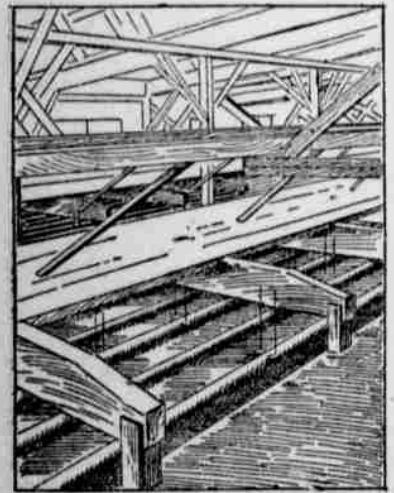
The Chinese imperial palace is the principal architectural feature of the Forbidden City, and is itself more forbidden still. To reach the palace it is necessary to pass three great walls. First, there is the great sixty-foot thick wall of the entire city. Within this is the wall of the Imperial City, six miles in circumference. Within this again is the wall of the Purple Forbidden City, which is sacred to the Emperor and his family. The Purple Forbidden City, or Tze-Kin-Cheng, is nearly square, its sides facing the four points of the compass. Two walls running from north to south divide the space into three parts. The central part contains the principal building. To this division the chief entrance is the Wu Man, or Meridian Gate. Inside this gate is a large court, and running through it an artificial stream, spanned by five bridges of sculptured marble. Another gate at the end of the bridges gives admission to the Palace of Supreme Peace, or Tai-ho-tien, the principal hall of audience. Here the dignitaries of the empire meet and bow to His Majesty. To bow-to is to kneel thrice and knock your forehead on the ground nine times. To the innermost palace no man is admitted. It is here that the emperor lives, surrounded by his uncounted wives.

The Modern State of the Salt Industry.

Interesting Processes.

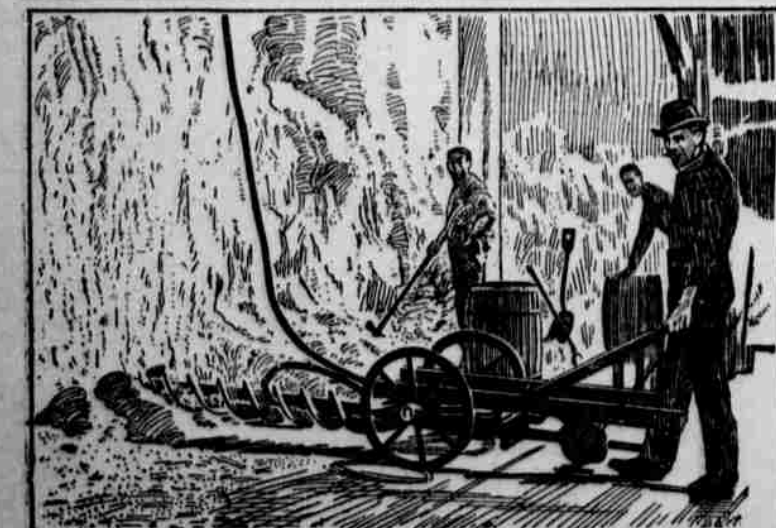
CONSPICUOUS among the natural resources of the State of Michigan are the forests which cover a considerable extent of its surface and the large deposits of salt which underlie a great portion of its area. In the vicinity of Manistee where the "salt blocks" which form the subject of the present article are located, this deposit consists of a stratum of rock salt, which is from twenty-five to thirty feet in thickness. Salt blocks are usually built in connection with sawmill plants, with a view to making use of the refuse as fuel, and for this reason the city of Manistee has of late years become such a large producer of salt that about half of all this commodity manufactured in the State is made at that point.

As soon as the site of a well has been selected, a cellar is excavated and planked up and a derrick, usually about eighty feet high, is erected and the work of driving commences. The



TOP VIEW OF A GRAINER, SHOWING THE BRINE RUNWAY, AND AGITATING PADDLES.

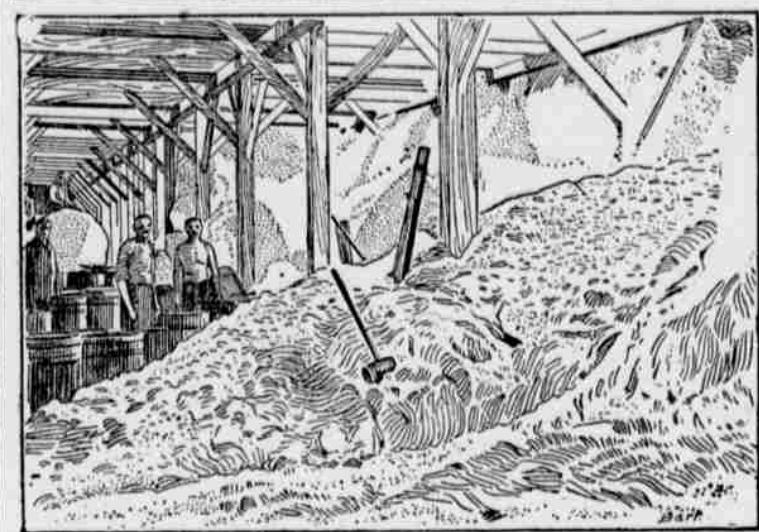
first operation is to sink a section of ten-inch pipe, by means of a sand pump, to a depth of about 400 feet, from which point the well is continued by inserting an eight-inch pipe within the ten-inch pipe and driving it down to the rock formation, the eight-inch pipe extending from the rock up through the ten-inch pipe to the surface of the ground. From the rock formation down, the rock is drilled without any pipe casing, except through such portions as are liable to cave. Salt well No. 5 at Manistee, which is described in the present article, is fairly typical of the wells in this vicinity. The ten-inch pipe reaches



COMPRESSED AIR AUGER FOR LOOSENING COMPACT WALL OF SALT.

to a depth of 400 feet, the eight-inch pipe to a depth of 616 feet, where the rock formation is encountered. The bed of rock salt, which is thirty feet

in thickness, reaches to a depth of 1985 feet, making a total depth of 2615 feet. The yield pumped from this well amounts to from 2000 to 2400 barrels of brine in twenty-four hours.



SALT PACKERS AT WORK IN THE STORAGE ROOMS.

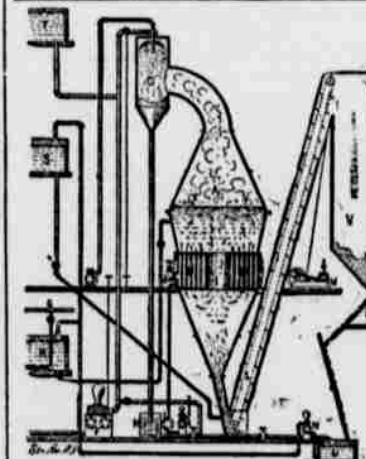
The accompanying diagrams and photographs represent the modern state of the art. As the brine is pumped from the well, it is delivered to the storage cisterns, from which it falls by gravity to the settlers, and from the settlers to the grainers. In the settlers it is heated to a temperature of about 170 degrees Fahrenheit. Upon being allowed to cool, the gypsum, which, if it were not removed, would form a coating on the steam pipes in the grainers, is precipitated, and as soon as precipitation is completed the brine is drawn to a long box running across the head ends of the grainers, and from the box it is fed to the grainers as required. The latter are long, shallow tanks, near the bottom of which, and extending throughout their full length, is a series of steam pipes. The brine being admitted to the grainers, the steam is turned on, the liquor soon acquires a high temperature, and rapid evaporation takes place. To assist the precipitation of the grains of salt, the surface of the brine is agitated at frequent intervals by means of a series of paddles which are operated by a lever at the end of the grainer. The salt accumulates at the bottom, until in the course of twenty-four hours there will be a layer from six to eight inches deep. The salt is lifted from the grainer by means of long-handled, perforated shovels, and is deposited on the runway. As soon as it is thoroughly drained, it is shoveled into carts, run out over the storage bin, and dumped.

The plant under consideration consists of five wells, three cisterns each eighteen feet wide by 100 feet long and eight feet deep, and six settlers twelve feet wide, 175 feet long, and eight feet deep, capable of holding

Part of the salt manufactured in this plant is made by the vacuum-pan process. In operating the plant the pans are first filled by gravity, after which the gravity supply pipe is closed, and the valve in the pipe connecting with the settlers is opened, the brine being drawn into the pans by the vacuum therein as the evaporation proceeds. The water and the air pumps are inserted, steam is admitted to the steam belt, and the process of manufacturing salt begins. The atmospheric pressure being removed from the surface of the brine, the latter boils violently at a temperature which seldom rises above 150 degrees Fahrenheit. The brine rushes upward through the tubes, and under the rapid evaporation the brine becomes so dense that it can no longer hold the salt in solution. Fine crystal grains are formed, as the liquid circulates through the large three-foot opening in the steam belt, and falling to the bottom of the pan they pass to the foot of the elevator, whence they are taken up and dumped into the drainage bins. After the salt has remained in these bins for a period of sixteen to eighteen hours, it is drawn off into carts, wheeled to the storage bins and dumped. It is customary to use the pans for not longer than twelve consecutive hours, at the end of which period they are emptied, hosed out with fresh water, and cleaned. One of the pans is run during the day and the other during the night, each pan making in a twelve-hour run from 600 to 700 barrels of salt, the combined production being from 1200 to 1400 barrels a day.

In the manufacture of salt it is a recognized necessity that a large quantity must be kept in storage, and for this purpose the salt is dumped into vast storerooms which measure from 200 to 300 feet in length, and the same in width; the amount in store frequently aggregated 400,000 barrels. As these rooms are from sixteen to twenty feet

deep the salt becomes tightly packed, and has to be worked loose by packers with picks, shovels, grubhoes, etc., who proceed to quarry, break up and pack the salt into barrels. With the coarser grades of salt made in the grainers this is not a difficult matter, but the finer grained, vacuum-pan salt becomes compact and very hard, and the packer soon finds himself confronted by a wall of salt twenty feet in height and as white, if not as hard, as marble. To undermine and bring down this mass



VACUUM PAN PLANT.

A, vacuum pan; B, steam belt; C, condenser; D, spray plate; E, air pump; F, cold water pump; G, steam pipe; H, sealing tank; K, hot water pump; L, elevator; N, brine pump; R, brine settler; S, brine tank; T, water tank; U, brine vat; V, drainage bin.

of salt is a dangerous operation, and involves long delays; and to overcome these difficulties, the companies have used a compressed-air driven spiral auger, which is ten inches in diameter and provided with a double spoon point. The auger is mounted on a truck and the back end of the shaft is attached to a three-horse-power rotary air drill machine. A row of holes is driven into the salt wall at a height of ten inches from the floor for a distance of six feet into the mass, the holes being drilled as closely together as possible. After an interval of one to three hours, a fall of salt takes place, a mass equal to 400 or 500 barrels of salt being brought down in each section. The saving of labor by the use of the compressed-air drill is shown by the fact that sufficient salt can be undermined and caved in this manner in one-half day to keep the packers at work for two or three days following. —Scientific American.

A Cheerful Notice.

The following notice was lately affixed to a church door in Hertfordshire, England, and read in the church: "This is to give notice that no person is to be buried in this churchyard but those living in the parish, and those who wish to be buried are desired to apply to the parish clerk."

A BRIDE WITH PASTED EYELIDS.
One of the Odd Marriage Customs in Korea.

In Korea when a girl is married she appears at the wedding ceremony with her face painted a ghastly white, her lips dyed scarlet and her eyelids past-



BRIDE WITH HER EYELIDS PASTED.

ed together, so as to deprive her entirely of sight.

As for the groom, he wears a hired suit, a hat of woven horsehair and a pair of shoes closely resembling "Arctics."

The life of the Korean woman, while secluded, is not as unbearable as that of the women of many other Oriental nations. They are poor, and consequently compelled to work very hard, but as a rule they are well treated by their husbands. They have pretty names, meaning Plum Blossom, Treasure, etc., but after marriage are known only as So-and-So's wife, until they have a son, after which they are known as the mother of that son.

Has 3,000,000 Silkworm Eggs.

Professor Carl Braun, of Bangor, Me., has 3,000,000 eggs in cold storage in his laboratory. They are the eggs of the silkworm, and were sent to him from Japan. Professor Braun is President of the National Science Association, and long has believed that Eastern Maine is a good place to start a silkworm industry. He is planning to keep the eggs in cold storage until the hatching time comes around and then the sun, warmth and stir will do the rest. He says silkworm culture offers an alluring opportunity to Maine women and girls to branch out into a new line of work. He has made a number of experiments and has found that silk can be "raised" in Eastern Maine.

In Line With the Majority.

"Why, it's old Diogenes!" cried Skinnus, as the ancient philosopher, lighted lantern in hand, plodded slowly down the street.

"Hullo, Diog.," cried Patroclus in bantering tones; "found that honest man yet?"

The sage stared up at them. "Honest man!" he grumbled. "I'm not looking for an honest man; I gave that up long ago."

And he turned to hobble away. "Then what are you looking for?" cried young Herclius.

Diogenes paused. "I'm looking for a hired girl," he growled; "ours left yesterday." —Cleveland Plain Dealer.

Tough on the Joker.

The contributor wrote a joke about a plumber whose bills were always normal. "That," said the editor, rejecting it, "is not a joke; it's a lie."

The contributor tried again with a story of the plumber whose charges left nothing to be desired on the score of size. "That," said the editor, who had suffered, "is not a lie; neither is it a joke." —Scraps.

Historic Bell of Kennebunk.

The bell which called Kennebunk to celebrate the one hundred and fiftieth anniversary of the Unitarian Church was cast by Paul Revere. —Portland (Me.) Eastern Argus.

How Boys of 1784 Dressed.

Until the time of the Revolution children dressed precisely like their parents. This goes to explain their painfully mature air in their portraits. In the illustration reproduced of the



boy in calico, we have one of the first attempts at change. Cotton had come into general use and was worn both summer and winter. Figure calico in high colors is the material of this boy's suit. —New York World.



THE EDICTS OF FASHION.

New York City (Special).—A pretty outdoor bodice, and at the same time one simple of construction, is always welcome. In this model, reproduced



BODICE FOR A WALKING FROCK.

from the Philadelphia Record, tucks dispose of slight fullness at the waist both back and front, the opening in the latter being fastened by cords from tiny gilt or silver buttons. The vest we should suggest making in either white satin or cloth embroidered all over with an indescribable design in gold and silver thread, a narrow applique of the same edging the revers, cuffs, and that smart Medici collar, which is so invaluable in imparting an outdoor air to a bodice.

Black panne or satin, slightly folded, fashions the corselet, which is obviously made over a well-shaped and boned foundation.

Two Elaborate Blouses.

Of the two blouses shown in the large engraving the first is of chiffon



NOTABLY HANDSOME BLOUSES.

in the new tea-rose yellow coloring, over this charming foundation coming black net embroidered in jet paillettes, and in its turn overlaid with a design of single flowers and leaves in ivory lace applique; while then at the waist there is a deep swathed band of rose-ink silk, a twist of which—in a slightly paler shade—is drawn up between the glittering meshes of the net in front, and finishes in flower-like rosettes beneath a yoke of shirred yellow chiffon, which gives place to a collar-band of folded chiffon decorated with jetted flowers arranged in medallion form.

The second blouse is of plisse chiffon in the delicate coloring of old ivory (the very latest fashionable shade this), where the soft effect of the closely clustering pleats is considerably increased by the use of pressing instead of stitching to keep them in place. Medallion insertions of mellow-tinted old muslin embroidered in a floral design are edged with black Chantilly lace; while at the sides, as you may see, some other lace of ivory-tint is introduced. Bands and rosettes of black velvet baby ribbon hold the lace together in front over the fullness of the plented chiffon, and there is a waist-band to match, while the revival of the quaint old fashion in sleeves is shown in quite its prettiest form by the effective arrangement of the combined laces which give place just below the elbow to a big puff of the ivory chiffon, which, after being caught in closely at the wrist, is finished with a frill edged narrowly with black lace.

The Newest Leather Belt.

Soft fawn-colored or pearl-colored suede leather or ooze leather forms a stylish belt for the fastidious girl in a world which is much given to wearing pulley belts of satin or corded silk.

The newer leather belt should match as nearly as possible the tone of the homespun suit. Beautiful light browns or grays predominate. Select a chateleine bag to match, for this is the pocketless age. Get a bag with an outside half pocket, in which you can tuck

your little kerchief, so as to get it easily without opening the chateleine bag in which your money is laid away.

You can get a red or black and sometimes a dark blue leather belt, also a cream one. They are much less wide than formerly. The latest tapers off very much in front, where it shows decidedly more narrow than at the back. They run in sizes from eighteen to twenty-four inches. The narrow leather belt is certainly quite smart.

An East Indian 'Kerchief.

A great many girls like to cover the top of the head when bathing with a silk handkerchief of some becoming color, instead of wearing one of the mackintosh caps. The handkerchief can be chosen of a becoming tint or to match the bathing suit. If your suit is of black serge, satin or brilliantine, or of navy blue material, you can use one of the bandanas of glorious East Indian coloring, tropical greens and orange, blue, violet and dusky reds. Cut the bandana in half diagonally and then it is just the right size.

New Summer Stockings.

There is no silk nor design of floriated pattern on the new summer stockings except foulard stockings. It is simply the clever idea of a merchant who sells silks and also hosiery. Fine list-thread stockings of colors to match the foulards most in demand, blues of various shades, browns, gray, a few "crushed raspberry," amethysts, sage green or tans are heaped up by the silk counter. Some, but not all, have open work meshes as decoration. They are obviously meant to be worn with low-cut shoes.

Popular Lace Bows.

A new trimming exploited this season occurs in the lace bows, made very small and very neatly. They do not appear singly, but in a series, connected with narrow satin ribbons, upon which they appear to be mounted. They

can be used in various ways, and on a great many materials. Their manifest destiny, however, is on organdie and lawn frocks or dainty summer gowns of some sheer woolen material.

A Hat Trunk.

A hat trunk or hat box, as our English cousins say, will accommodate as many as half a dozen pieces of millinery. Each hat has a stout cushion, which enters the crown and serves as a mount. The hat pins run through the cushion and fasten your big hat to the mount. Now it is firm and cannot wobble about and so get out of shape.

Mohair Outing Suit.



Mohair, the most serviceable material made for summer wear, is used for the above costume, reproduced from the Chicago Record. The tone is sand color, trimmed with tailored bands of golden-brown silk. With it a violet silk skirt, finished with a high white satin stock, is worn.