

Japanese capitalists have bought 100,000 acres of land in southern Mexico, upon which they will establish an extensive colony.

According to the statistics of the State Board of Charities more than half of the people of New York city receive free medical attention. In other words, persons who are scrupulous in the matter of paying their own way have to help to pay for those who are able to pay for themselves.

Speaking of Walt Whitman, the London Critic describes him as "the one great American poet." There can be no doubt about Whitman's greatness. But here it may be remarked that Tennyson, though a warm admirer of the "good gray poet," gave Poe the foremost place among our poets.

Dr. Johnson of Brunswick, Cal., himself a colored physician, has collected the figures of the vital statistics of nearly 300 towns in the southern states, which show that the death-rate of colored people is double that of whites in the same country; and not only this, but that the birth-rate is smaller among the colored than among the white population.

A theosophist of Washington avers gravely that Joseph Leiter, the Chicago wheat king, is a reincarnation of Joseph, the son of Jacob, and has the same bent of mind that made the latter such a favorite with Pharaoh. He admits that the modern Joseph is not quite up to the level of his previous incarnation, but says he is young yet and should be given a chance to grow.

Word comes from Paris of a curious and successful experiment that a florist there has made. He has managed to give the chrysanthemum the scent of the rose, the sunflower that of the jessamine, the calla lily that of the violet. A rose by any other name may smell as sweet through this experiment, but it is to be hoped that the French florist will not try to improve on nature when it comes to the perfume of the real rose.

"Put it in any way you choose," said a recent speaker, herself a woman, "to the vast majority of mankind home means cookery. A woman's domestic power and influence are in most instances in exact proportion to her ability to cook or to command good cooking. The old phrase 'a notable woman' means, above and beyond everything else, skill in housewifery, and it means this just as much today as it ever did. It is a very democratic standard, for it applies no less to the tenement-house woman than it does to the mistress of a score servants, but it is none the less forcible for that. Like love, housewifery levels all ranks. It is common ground whereon all women, be they high or low, rich or poor, must meet, the only aristocracy that it admits being based upon excellence."

An English physician thinks that the example of Sandow, the strong man, is not altogether a desirable one for boys. While he admits that it is a worthy ambition for a boy to become well developed and a strong man, yet when physical culture is carried to the extreme, as by Sandow, it becomes pernicious. He says that two dangers confront Sandow, and they are, first, death at an early period after complete suspension of the athletic strain, and second, death, at middle age, or soon thereafter, from a continuance of his work. When Sandow, it is argued, rests from his muscular exertions he will not be able to bring about a corresponding involution of his heart and lungs. Sandow, while a wonderful athlete, has a dangerous system of muscle-building, and one that should not be imitated.

Says the Philadelphia Ledger: "We don't want to fight," but the figures of Adjutant General Broeke's report show that we can if we must. In the five states of New York, New Jersey, Pennsylvania, Maryland and Delaware, forming a very small section of the Union, he finds a total of 2,233,747 men available for military duty. Comparatively few of these are trained in military tactics, but most of them are familiar with arms and intelligent enough to use them properly without much drilling. In this connection it is well to remember that of the large number of foreigners included in the report by far the greater part received a thorough military drill at home before coming to this country, and are, in reality, trained soldiers. Should they take up arms in defense of their adopted country they would of themselves be a formidable fighting force.

MAKING BIG GUNS.

How the Government Hurry-Orders For Great War Weapons Are Being Executed.

Down on the meadows of the Passaic, on the shore of Newark Bay, and within the bounds of the city of Newark itself, says the New York Herald, men are working day and night on guns for the Government. The complex and exquisitely adjusted machines that turn and bore "jackets" and "tubes" never stop, except for a "rest" of an hour or so or the replacing of a cutter dulled by hours of slow, steady ploughing through the hardest and finest steel.

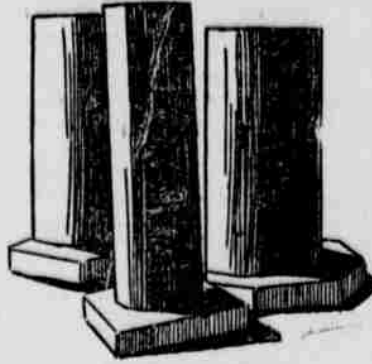
Steel is everywhere, in almost shapeless, oblong ingots, fresh from the casting room; in forged lengths, in cylinders, now bearing some resemblance to a "rapid fire," and in chips and shavings. There are strange and interesting scenes in these gun shops and the pictures presented each hour are dramatic in the extreme. Here in these processes is to be seen the acme of American manufacturing, the great essential fact being the machinery, that is almost automatic in its work, and the few men needed to control and guide it.

Except in the forging room scarcely a blow of a hammer is heard. The shops are almost as silent as the grave. Wheels revolve, cutters turn, men stand placidly by the side of machines, moving softly here and there. All this time, each second, the gun that some day will belch forth fire and steel of its own is coming nearer completion. Chips fall as the bars revolve, but the cutters are not heard. The guns, it would appear to the onlookers, are almost making themselves.

Of the starliest type of American mechanics are the men employed. They are workmen who think and who know, men who can judge when a certain instant has arrived, knowing its approach by intuition, rather than

long since relegated to the scrap yards.

Here is the first stage of the modern gun—ragged and rusty metal that is carted in wheelbarrows up to the furnace doors. The maws of blazing heat, several thousands of degrees in intensity, stand open to receive it. So overwhelming is this heat that even the master melter has to put on blue glasses to peer into the flames rising

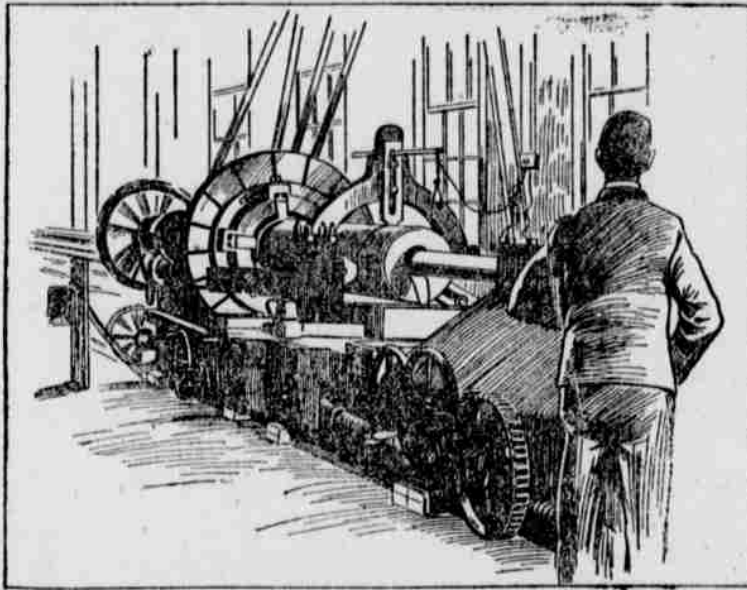


ROUGH CAST.

over the bubbling sea of metal when the doors are open. When the doors are dropped down—that is, shut—there is only revealed a single spot of brightness, an eye that looks into the furnace's flame, and even this cannot be approached too closely with the naked eye.

Beginning the Gun.

The gun is under way. Ten tons of metal are already in the furnace—a lake of molten, seething metal held in by banks of sand. Other things of steel are to be made of this mass, the gun works being only a portion of the Atha & Illingworth plant. Whether used for peace or war, steel is steel,



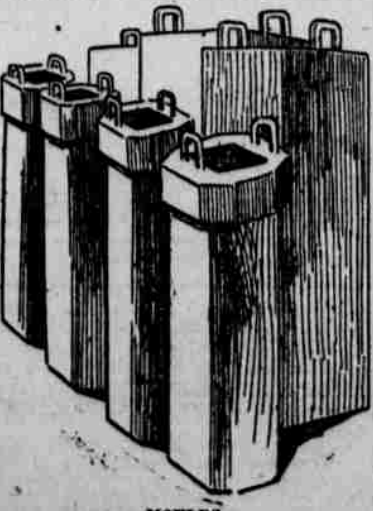
BORING MACHINE.

men of brawn and muscle. The latter qualities are not so much needed in a gun shop of to-day. Should a partially finished tube or jacket have to be moved there is the electric traveling crane overhead, that, at the jerk of a cord, swings over its grappling irons, and these need only to be attached. The gun man of to-day needs only to guide and to know.

These works are of the Benjamin Atha & Illingworth Company, one of the three concerns in this country that have the plant and the skill to turn out guns of size. Their main shops are at Harrison, the next station to Newark, and their casting shops across the Passaic, on the "Island." Dozens of pieces for the navy and for coast defence are being made here.

Work of Great Care.

Six weeks is practically the minimum of time for the making of a modern gun, and to finish one within that space everything would have to go marvellously well. The "treatment" of the steel would have to be a success at the very first attempt—something that does not often happen—and the



MOULDS.

first tests would have to show that the Government standard had been reached. Oftener than otherwise these results can only be obtained through much trying and the expenditure of time. A batch of guns may thus take months in the making, while good luck may bring it down to weeks.

It is in the casting shop, of course, that the process of gun making has its very beginning, in the furnace where steel is made from a medley of pieces of old iron, pig iron lumps, broken bits and odds and ends of castings.

differing only in quality. It is all "boiled down" in the same way.

In shadow is the casting shop, except when the doors are raised, when a flood of light, a wave of extreme heat, is thrown out. In the dusk of the shadows grimy men raise the sea of metal with long bars. The master melter, never still, steps now and then to his wheels, set at one side of the furnace and looking like the brake wheels on a freight car, and gives one or the other a sharp twist. By this he regulates his fire—five hundred degrees at a twist. The silica bricks with which the furnace is lined can stand four thousand degrees of heat and more before they commence to melt. The master melter runs up the heat to the extreme point and then lets it down.

There are three "heats" a day in the casting shop. Three times metal is heated, three times it is let go with a mighty rush into the casting pot. The last few moments of each heat are the dramatic instants. It is then, at the judgment of the master melter, that the furnace is fed with "medicine," shovelfuls and blocks of metal being tossed in. On this depends, the quality, the strength, the elasticity of the steel, essentials of the most vast importance of the gun of to-day.

Into the Casting Pot.

Two hours is usually sufficient for the boiling of this steel in its cradle of sand. At last the one moment arrives. The bar at the furnace's back is worked through the sand to make an opening. An instant, and into the casting pot below the mass runs, scattering millions of sparks, a glowing, golden torrent that foams and hisses as it plunges down.

The picture of the gun's second stage is superb. On every hand fly these sparks, and the mass bubbles and seethes in the casting pot. On its top, through the glow, can be seen a dirty mass—the slag or the scum that is of no use or value. But the picturequeness of the scene has not ended. The casting process is only half through. The liquid metal must get into its moulds, and that in short order.

On a track the casting pot rests. It is pushed along this track until a gigantic crane overhead seizes it, swinging it aloft. Over mounds of sands it is swung, and the metal, by the movement of a bar, is allowed to drop down in a thin stream. Again shower upon shower of sparks, surrounding the men who, with chains and slaves, control the clumsy pot and pull along the crane. The grim old shop, with its

floor of sand, its unrelenting dust and its dreariness, is made into a brilliant cavern for the moment, and the toiling men are supernatural in the light.

In the Rough.

A prosaic time follows, when the metal in the moulds must cool. When the sand is finally knocked away the gun that is to be is only a rough mass of cast steel, indicating only to the expert its fine quality, and not even to him in any degree, for the tests must come to prove that. In the forging shop this mass is hammered and worked until it becomes an octagonal ingot of just twice the weight it will possess when it is finally turned and bored into a "jacket" or a "tube." The hoops, the third part of a gun, are cast and forged hollow, not in solid cylinders, as the jacket and tube are.

With the carrying away of the rough ingot of steel from the forging shop the special work of gun-making commences. The boring and turning factory is the scene of the first step in this process.

Completed guns, ready for mounting and for fire, are not turned out in these gun shops. The finishing touches, the actual putting together of the parts of the gun, the rifling itself, are done at the ordnance works in Washington. It is the business alone of a gun shop to make the steel and to hand over to the army and the navy the three parts of a great gun—the "tube," the "jacket" (which is slipped on over the tube and then "shrunk on" by contraction) and the "hoops," two in number, which, for the purpose of strengthening, are fitted on tightly over the muzzle end of the tubes. Once these three parts are together the metal becomes, practically, one piece and it would be very nearly impossible, by any art or science known to experts, to get the jacket off.

Finished by the Government.

Only the "rough machining," in technical phrase, is done on these guns, this meaning that the final finish and the rifling is put on by the Government itself. "Rough machining" seems, however, a strange term, for if delicate work requiring the utmost accuracy and preciseness is not done here it never was anywhere.

A Checkerboard Fish.

Joseph Evans, of Thirteenth street and Snyder avenue, is the owner of a very queer looking fish. It is four feet long and has a tail two feet in length, which is spotted and striped, like a snake. Evans caught the fish in an oyster dredger while at work on the oyster boat Mary Colman. It lived nearly a day out of water and caused no end of trouble before it finally collapsed. The skin of the strange inhabitant of the deep resembles a checkerboard, being uniformly colored with black and blue squares. Mr. Evans intends having a glass case made for the pretty creature and will exhibit it in his parlor. Several scientific men, who have seen the fish, are at loss as to how to classify it, and all of them agree that a "what-is-it" fish would be the proper name for it.—Philadelphia Record.

Water a Cure For Indigestion.

"We must give special attention to the outside of the body as well as the inside," writes Mrs. S. T. Rorer on "What to Eat When You Have Indigestion," in the Ladies' Home Journal. "The skin must be bathed every morning with tepid water, followed by a brisk rub. This is equally as important as correct diet. A good rule is to use water freely inside and out. At least two quarts of water daily should be taken; half a pint the first thing in the morning and the last at night, a cupful of warm water before each meal, and the remaining quantity divided and taken before meals."

Centennial Celebrations.

This year's crop of centennial celebrations includes observations of the four hundredth anniversaries of Vasco de Gama's discovery of the way to India by way of the Cape of Good Hope, at Lisbon, in May; of the burning of Savonarola at Florence, also in May, and of the birth of Holbein at Basel, in Switzerland. Montpellier will celebrate the hundredth anniversary of the philosopher, Auguste Comte; Ancona that of the poet Leopardi, who was born at Recanati, close by, and Paris that of Michelet, the historian.

Old Bank in Nebraska.

The building in which the oldest bank in Omaha is located is in a very dilapidated condition. The porches



NEBRASKA'S OLDEST BANK.

are tumbling and its windows and tops of the doorways have been taken possession of by the sparrows.

Not only was this the first bank of the town, but the first financial institution under the charter of the Territory of Nebraska. Its president was Thomas H. Benton, son of the Senator. Leroy Tuttle was cashier, and A. N. Wyman teller. In the panic of '37 the doors were closed.

The ancient structure is decidedly picturesque in its dilapidation and has been recently been put into pictures by local artists.

THE REALM OF FASHION.

Hints About Hairdressing.
Modern coiffures are truly "fearfully and wonderfully made." The hair is either crimped to excess or worn so smooth that it causes discomfort even to look at. A certain

in a cluster. Doubtless by next season the hair will be powdered, and even diamond dust may sparkle in the locks of our fashionables.

Latest Styles in Ribbons.

Among the latest styles in ribbons are the colored failles and grosgrains, satinback velvet, with either violet or mode backs, and black double faced satins, with raised flowers on one side. Other, emerald, ruby and tawny brown lead in colors, and are much used for dress and blouse trimmings. Harlequin blacks and printed failles are also much in favor. The demand for taffeta is unabated. The favorite shades are cardinal, ox-blood and cherry, and they are a trifle more expensive than other colors. The national blues, violets and greens are also popular tints, and plaid taffeta is appearing.

Novelties in Dress Fabrics.

Among the novelties in dress fabrics are the new cashmeres wove in two colors. They are beautiful and will make lovely gowns. Silk faced serge is a handsome material for tailor-made seaside and country gowns.

Attractive Suit For a Little Boy.

Navy blue cloth, says May Manton, made this attractive suit, the broad sailor collar, cuffs and shield being of white serge, decorated with rows of narrow blue braid. The blouse is fitted with shoulder and under-arm seams, an elastic being inserted in the hem that finishes the lower edge to adjust it in true sailor style. The fronts are closed invisibly, but buttons and buttonholes can be used if so preferred. The broad sailor collar ends in pointed lapels that are joined to the cut-away neck in front, the



A FRENCH COIFFURE.

set of young girls has adopted the most impossible arrangement of the hair, which is made only more grotesque by the fact that the most casual observer can discover that it has been curled on a hot iron. What the foundation of this particular coiffure is, it is not feasible to state, as it looks like a bird's nest and seems to be a succession of waves and curls that stand out about the face, forming anything but a becoming frame. The



LADIES' WAIST.

measurement from the tip of the chin to the top of the pompadour is literally a foot. Consequently the lines of the head and face are lost and the features dwarfed. Crimping irons are not to be scorned. In fact, they are a most useful accessory of the toilet. But they should be used with judgment. Individual styles should be studied. Women with broad faces should avoid both too narrow and too broad effects. Both are fatal to a round face. If the woman with a narrow, oval face, with a head well poised on a slender throat looks ravishing in a broad, loosely arranged coiffure, with high puffs on the crown of her head, it does not follow that her sister, with the short neck, wide face and high brow will find the same mode becoming. Individuality is the keynote of a graceful coiffure, as it is of all other fashions.

Lovelocks, or "beau-catchers," have reappeared, and the smartest women in the East do not consider that the hair is properly coiffed without them. The genuine lovelock is worn just by the ear, where it was placed by the beauties of past centuries. Few women can stand extra breadth at that point, however, and unless they wish to be extreme, they permit a lock or two to turn on the forehead or temple. The lovelocks predict a revolution in the styles for coiffures. They even suggest that women of fashion may allow their hair to be white. Everything points to modes that were followed in the luxurious days of the French court in Marie Antoinette's reign. The pompadour remains the favorite style for arranging the hair, but great effort is being made to re-establish long and short curls. For evening the hair is worn quite high, and when the sigrettes, feathers or ribbons are added, the arrangement is quite eight inches tall. The wearing of flowers in the hair is one of the newest fads, and exceedingly dainty are some of the concoctions the milliners are making up. Roses are the favorite flowers. The prettiest arrangement consists of one rose and a few leaves, which are put close against the knot of hair at the left side, and from this stands up a straight spray of one rose, some small buds and the leaves. Another style is of red roses

shield portion being simulated by a facing on the underwaist, which is disclosed between the lapels. A pocket is inserted on the left front. The sleeves are gathered top and bottom and finished with round cuffs at the wrists, neatly trimmed with rows of braid. The knee trousers are shaped by inside and outside leg seams, small hip darts fitting them closely at the top. The closing is at the sides, where pockets are made, and a hip pocket can be inserted on the right hip if wanted. Buttonholes are made in under waistbands, and placed on the top to attach the trousers to the under waist, or buttons for suspenders can be put on if so preferred. Pretty suits are thus made up in various combinations of materials and colors, black and red, brown and fawn, or tan with cream being very stylish. The mode is suitable for wash suits of pique, Galatea, duck, grass linen, or flannel; braid, em-



BOYS' SAILOR BLOUSE SUIT.

broidery or insertion all being used to trim suits in this style. The quantity of material 27 inches wide required to make this suit for a boy eight years of age is 2 1/2 yards.