

CHILE'S CRACK NAVY

Would Find Lots of Trouble Getting Within Shooting Range of Our Seacoast Cities.

OUR BIG GUNS NEARLY READY.

Projectiles That Would Sink Any Ship Afloat, and That at Five Miles Out in the Sea.

PROGRESS AT THE BIG FACTORIES.

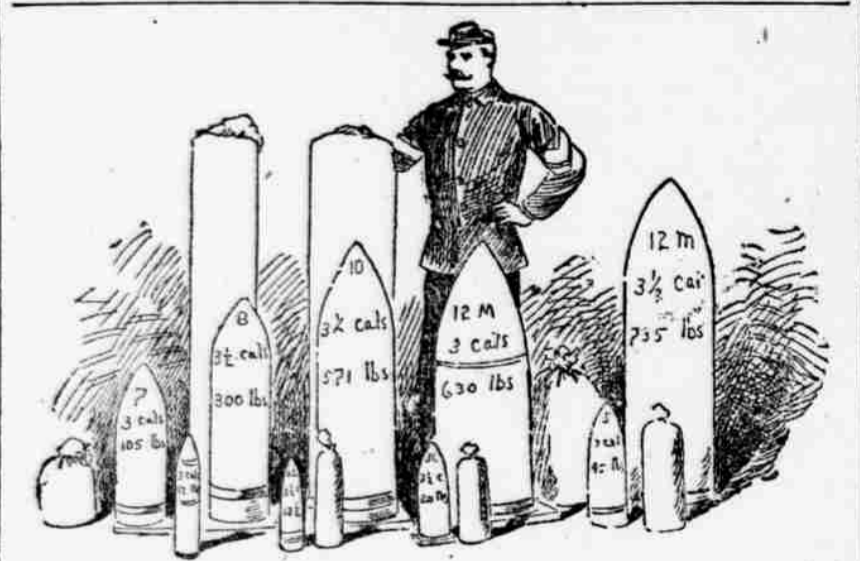
Illustrations From Photographs Showing Our Preparation for Defense.

SPECIAL TELEGRAM TO THE DISPATCH. WASHINGTON, Jan. 2.—The bluster about Chile has aroused the country to a lively interest in the offensive and defensive equipments of the Government. A great deal has been said about the offensive—but little about the defensive. In fact the need of coast defenses as compared with the growing navy received a tardy recognition. For, while appropriations for the one were begun in 1883 and the work of building up a new navy has been in active progress for the past eight years, it was not until five and a half years later, or in September, 1888, that a law was enacted which permitted a definite commencement upon the new plans of coast defense and modern armament.

The reproach that the United States had not a single modern gun to mount for the defense of the coast had become a phrase almost too hackneyed to hurt. Once felt with sufficient force, however, and recognizing that the sphere of navy operations is upon the high seas and that no adequate defense of our seaports can be made without permanent fortifications on land, and that neither could the ships of the navy act with effect and safety to themselves without fortified harbors as bases of operations, we have now for three years past been busily at work upon the coast defenses.

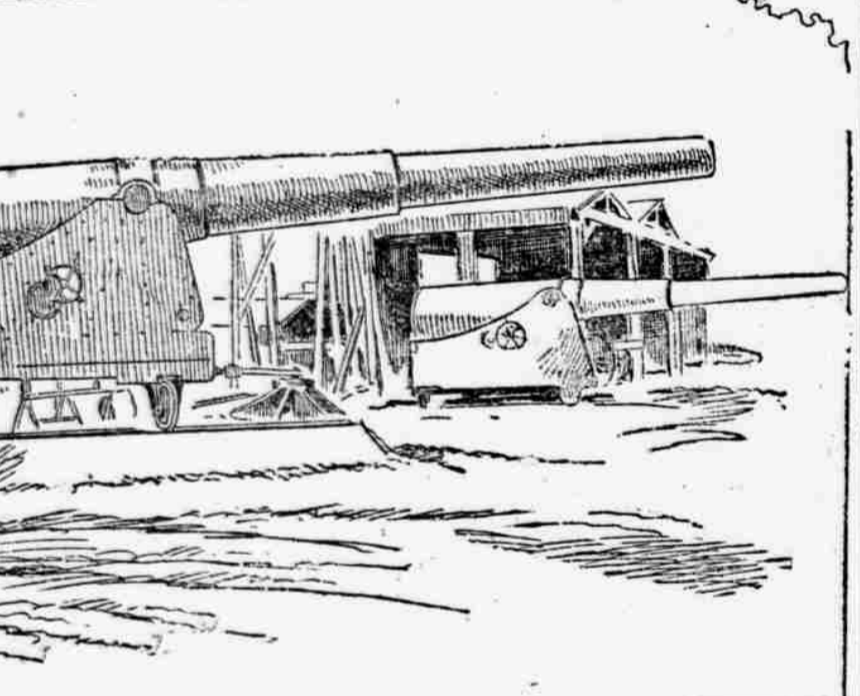
Adequate Coast Defenses Assured. The work is necessarily slow, as THE DISPATCH has often shown, but, owing to

most prepared, are based generally upon the report of the board on fortification and coast defenses made in 1888. That board, as may be well known, submitted estimates for land and harbor defenses of the principal lake and seacoast ports, 27 in number, the land armament to consist chiefly of 48 16-inch, 203 12-inch, 222 10-inch and 102 8-inch steel breech-loading guns, or an aggregate of 571 heavy guns and 700 12-inch breech-loading rifled mortars. A policy of moderate annual appropriations was inaugurated two years later in place of that recommended by the board, to appropriate \$21,000,000 for the first year and \$3,000,000 yearly thereafter until the completion of the work. The present policy has the apparent merit of providing just so much of the work demand. It has so far satisfied these demands as regards the making of guns, but unless the proper extension and development of the work is unduly re-



POWDER CHARGES AND PROJECTILES.

stricted, appropriations of increased amounts must henceforth be provided. A point has now been reached when a generous rather than a restrictive policy in the matter of appropriations will conduce to economy. Up to the present time 138 of the seacoast guns and 73 of the heavy rifled mortars have been provided for. One-half of all these guns and practically all of the mortars are made by private establishments, while the arms gun factory at Watervliet Arsenal, New York, which will be one of the finest and best equipped shops for finishing and assembling guns in the world, is nearing completion, and is already in condition to machine and finish the forgings as



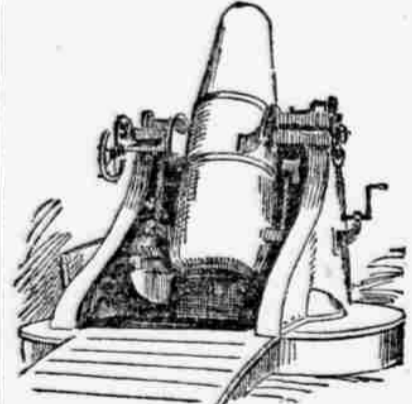
THE TWELVE-INCH STEEL BREECH-LOADING RIFLES.

the vigorous manner in which it is being prosecuted, great progress has been made, and the Secretary of War has been enabled to state in his annual report that the problem of adequate coast defenses has been practically settled. The brunt of this work has so far devolved upon the ordnance department of the army, which has first to provide the guns, carriages and ammunition. As these are now being turned out, however, the engineer department is engaged upon the erection of batteries and emplacements at New York, Boston, San Francisco, Hampton Roads and Washington.

There are not lacking those who did and who still maintain that this procrastination was a wise measure to economize without prejudicially to the Government. It is fortunate for such that the emergency requiring adequate means of defense has not already arisen. Other objectors, who feared that guns would be built which might become obsolete before they were needed, and who desired to await a time when something like perfection had been attained in the art of gun making, had more reason on their side, when that period of change from iron to steel guns was in progress about 1880.

The Call on American Steelmakers. The navy Bureau of Ordnance undertook the construction of six-inch built up steel guns in 1880 and of two others in 1882, the metal being simply annealed. A great advance was made by the Army Ordnance Department, when in a circular letter issued to gunmakers in April, 1883, it called for oil-tempered steel. The results of this circular were remarkably successful, and led to the production of oil-tempered and annealed steel in this country such as is used in all the guns now making, and is of a quality not elsewhere excelled.

The period from 1883 to 1888 was well employed, and no other country, it is believed, can lay claim to more complete investigation in this direction, or a more satisfactory demonstration of the extent to which theory could be relied upon to govern practice in gun construction. Finally, in 1888, when an opportunity was given to go ahead with the manufacture of heavy guns in quantity, the work was entered upon with a zest born of confidence and laudable desire to overcome in good time the handicap possessed by the sister service. The Army gun factory then produced the



A 12-Inch Breech-Loading Mortar in Spring Carriage.

Welding Company, Morgan Engineering Works, Pond Machine Tool Company, Niles Tool Works and the Southwark Machine Company. The necessity of having well equipped government factories is not, however, less mandatory. They are needed primarily to meet emergency demands for military supplies of every kind, and especially new material which has no kind or quantity, reached a commercial basis, and after such a status of any particular manufacture may have been attained they are not less needed to govern the cost of production and prevent the formation of "trusts" among the comparatively few firms which devote themselves to specialties in the manufacture of war material.

The Pacific Coast Left Defenseless. There is at present no plant of any kind adapted to the manufacture of heavy guns on the Pacific coast. The question whether the Government shall establish there a factory for the manufacture of the very considerable number of heavy guns and mortars required for the defenses of that coast has been carefully studied by a board of army officers appointed by the President, pursuant to the act of August 18, 1890. The report of the board, which also treats of the coast facilities for steel production on the coast and other localities, has been published, and is now before Congress for its action. The board finds that about 500 heavy guns and mortars may be required for the defenses of the Pacific coast and Puget sound, and the report states: "The board unanimously and as strongly as possible recommends the erection on the Pacific coast of a gun factory of a capacity such as to enable the guns for that coast to be ready at least as soon as those for the Atlantic and Gulf coasts." General Flagler, who succeeded General Bennett chief ordnance January, 1891, says that at the Watervliet gun factory the



A 4 1/2-Inch Deck-Plate After First Shot From a 12-Inch Mortar.

first eight-inch gun made wholly of forgings of home manufacture, and also the first 12-inch steel gun prepared for service in this country. The two services, army and navy, are to-day working independently to make such a service a deserved source of national confidence, and the spirit of friendly though keen emulation thus engendered is one of the best guarantees that can be given to insure good results and economical administration. The report on fortification, and the policy and plans for coast defense, as

DUQUESNE PITTSBURGH'S LEADING THEATER. David Henderson and John W. Norton...Managers. Week Commencing Jan. 4, '92. Wednesday—MATINEES—Saturday. MR. CARROLL JOHNSON IN HIS REFINED IRISH COMEDY DRAMA, THE GOSSOON. BY E. E. KIDDER. DON'T FAIL TO SEE SEE THE LAKES OF KILLARNEY IN SUMMER. THE LAKES OF KILLARNEY IN WINTER. THE HOME OF THE GOSSOON. THE OLD HUNTING LODGE. THE OPEN COUNTRY BY MOONLIGHT. THE STRUGGLE IN THE SNOW. THE UNROOFING OF THE CABIN. THE GRAND EST EFFECT EVER PRESENTED ON ANY STAGE. NO PIKES, LOST WILLS, MORTGAGES, CARICATURES OF THE CLERGY INFORMERS. Incidental to The Gossoon CARROLL JOHNSON will sing his latest songs, "THE IRISH ARE TRUE," "SWEET ANNABEL," "WEDDING BELLS," etc. All Scenery and Effects by MOHN & BECKER, Union Square Theater, New York City. Mechanical Effects by GEORGE FURVIS. SEATS NOW ON SALE. PRICE \$1, 75c, 50c, 25c. POPULAR PRICE MATINEE WEDNESDAY. NEXT ATTRACTION—Farewell Appearance Mr. and Mrs. Kendal.

HARRIS' THEATER. Mrs. F. Harris, R. L. Britton, T. F. Dean, Proprietors and Managers. Popular Prices Always Prevail at Harris' Theater, 10, 15 and 25 Cents! WEEK COMMENCING MONDAY, JAN. 4. Every Afternoon and Evening. DEVOY & SMILEY'S INTERNATIONAL COMIQUES In conjunction with ROBERT STICKNEY'S CIRCUS! Presenting a Performance Thoroughly ORIGINAL AND BRILLIANT. Week of Jan. 11—JAMES H. WALLICK. HARRY WILLIAMS' ACADEMY. Monday Evening, January 4. Matinees Tuesday, Thursday and Saturday. Mr. Sam Bernard, Miss May Adams, Smith and Lord, Miss Lizzie B. Raymond, Fitzgerald and Kelly, Handsome Ladies, The Grand Military First Part and a New Burlesque.

How to Protect Your Valuables. How often do we read in the newspapers about houses being robbed of large sums of money and valuable papers and jewels? It is easy and cheap to guard against being despoiled in this way. How? By renting a box to the Fire and Burglar Proof Safe Deposit Vaults, German National Bank, Wood street and Sixth avenue. Here you will find security for your valuables at a very trifling cost, with the key in your own possession. RHEUMATIC PAINS Stop annoying, and apply to the spot that aches WOOD'S PENETRATING PLASTER Once applied it acts continuously. PLASTER special power to penetrate deeply and stop pain. DRUGGISTS N. Y. Depot, 95 William St. The Thuma Dancing Academy, NO. 64 FOURTH AVENUE. ESTABLISHED 1883. NINTH YEAR. Opening of second session. Every evening of weeks commencing January 4 and 11. SPECIAL ADVANTAGES FOR BEGINNERS. Office open day and evening. The Famous French Folly Burlesque Co. JANUARY 11, THE IRWIN BROS.' SPECIALTY CO. SYMPHONY ORCHESTRA OF NEW YORK. WALTER DAMROSCH, Conductor. TWO GRAND CONCERTS, January 5 and 6, Tuesday and Wednesday. Evenings, at CYCLORAM AUDITORIUM, ALLEGHENY. PRICES—\$2.00, \$1.50 and \$1.00. Tickets now on sale at Mellor & Home's, Pittsburg, and Alex. Ross', Allegheny, Jan. 3.

Parisian Cloak & Suit Com'y. OUR MOTTO: LOW PRICES. YOUR MOTTO: SAVE MONEY. SIXTH ST. AND PENN. AVE. Manufacturing and Importing Retailers. WILL COMMENCE ON MONDAY The Greatest Clearing Sale Ever inaugurated in this city. \$100,000 WORTH OF WINTER CLOAKS. Must be sold regardless of value. MANUFACTURERS' PRICES CUT IN TWO. Save money. Visit the PARISIAN. D. L. DOWD'S HEALTH EXERCISER. For Brain-Workers & Sedentary People: Gentlemen, Ladies, Young: Athletes or Invalids. A complete gymnasium. Takes up but 8 ft. square floor space. New, scientific, durable construction. cheap. Indispensable to all who are overworked, nervous, or suffering from indigestion, or who are unable to exercise. Send for illustrated circular, or write for terms. Prof. D. L. Dowd, Sole Inventor, Pittsburg, Pa. 1891.

WEEK JAN. 4. Bijou THEATRE POPULAR WITH THE PEOPLE. UNDER THE DIRECTION OF R. M. GULICK & CO. MATINEES: WEDNESDAY AND SATURDAY. Ballet, Pantomimic Comedy, Spectacle, Heroic Drama! A Merry Harlequinade and a World of Novelties for Our Holidays and Glory Nights!!! Everything Absolutely New From the Opening Scene to the Transformation! W J. GILMORE'S OWN MAJESTIC REVELATION, Presented Under the Management of Chas. H. Yale. THE TWELVE AN EVERGREEN FOREST OF GORGEOUSNESS. REMEMBER, EVERYTHING NEW! BRING THE CHILDREN, AND SEND THE LADIES TO THE MATINEE. W. J. GILMORE'S LEGENDARY SPECTACLE THE TWELVE TEMPTATIONS. THE HAUNTED WOOD. The Most Extensive Indoor Show in All America! A Fortune in Wardrobe, Paint and Canvas! 4-PARISIAN PREMIERS-4! 80-IN THE CORPS DE BALLET-80! 125-PEOPLE IN THE REPRESENTATION-125! The Three Brothers LA MARTINE! The Eccentric Russians Salamonskys! DELHAUER, THE "HUMAN FROG!" SIGNORITA PAPIRILLO FRAULEIN NEUMANN and the Phenomenal CHITTEN SISTERS! RESERVED SEATS 75-50-25 PRICES Jan. 11---Chas. T. Ellis in "CASPER, THE YODLER."---Jan 11.

HARRY DAVIS' FIFTH AVENUE MUSEUM-THEATER. Week Commencing Jan. 4. THE STUPENDOUS SENSATION CREATED BY DANIEL BOONE AND MME. MILLI CARLOTTA Has induced Manager Davis to re-engage the King and Queen of LION TAMERS For one week more at the enormous salary of \$1,000. This will positively be their last appearance in Pittsburg, as they are booked to appear in the leading theaters of Great Britain the present season. Their troupe of five trained lions are the monster beasts that appeared in the first production of the great spectacle of "Nero" at Niblo's Garden. Their act is intensely thrilling and must be seen to be appreciated. They perform the most marvelous feats. A host of other strange and interesting curios. ALVIN : THEATER. CHARLES L. DAVIS, Owner and Manager. WEEK JANUARY 4. TO-MORROW NIGHT Mr. A. M. PALMER'S Company will give the first production of the Greatest Dramatic Triumph of the Age, ALABAMA A STORY OF THE SUNNY SOUTH, BY AUGUSTUS THOMAS. MATINEES WEDNESDAY AND SATURDAY. WEEK JAN. 11—MR. HENRY E. DIXEY.

GRAND OPERA HOUSE. Mr. E. D. Witt, Proprietor and Manager. MONDAY, JANUARY 4, Matinees Wednesday and Saturday. THE POWERFUL ROMANTIC ACTORS, FREDERIC BRYTON AND RALPH DELMORE IN FORGIVEN A DRAMA OF INTENSE HUMAN INTEREST. By CLAY GREENE, Esq. PRICES: 15c, 25c, 50c, 75c, \$1.00. Wednesday Matinee: 25c, 50c—Reserved. NEXT WEEK—DUFF OPERA COMPANY'S REPERTOIRE. The Gaiety Specialty Company IN THE THEATER. Next week—THE GREAT LALOO. BRAUN'S DANCING ACADEMY, 63, 65 and 67 Fourth Av. (SECOND FLOOR). BEGINNERS' CLASSES—Tuesday, Wednesday and Thursday evenings. ADVANCED CLASSES—Monday and Friday evenings. CHILDREN'S CLASSES (Advanced and Beginners)—Saturday afternoon, 1 to 3 o'clock. Three teachers in each class. TUITION—One quarter, 10 lessons, \$3.00. PROF. JAMES P. BROOK'S (Member of the American Society of Professors of Dancing, New York.) DANCING ACADEMY. Second term for misses and masters will begin Saturday, January 2, at 3 o'clock P. M. For ladies and gentlemen, Monday, January 4, at 8 o'clock P. M. Call for circulars at music store.