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PROGRESS OF AMERICAN DAILY NEWSPAPERS.

The daily Inter-Ocean, of Chicago, recently celebrated the 21st anniversary of its life by the issue of a sixty page number. All this for two cents. As each page contained approximately eight thousand words, probably it is not far out of the way to estimate that this one number of the paper presented not far from four hundred thousand words, which is nearly equal to the typographical contents of two ordinary book volumes each of five hundred pages. These sixty pages, besides telegraphic news and correspondence from all parts of the world, local matters and advertisements, embraced a very large amount of useful information upon a great variety of topics, including education, science, mechanics, the great Fair, and hundreds of other subjects of interest to the general reader.

The Inter-Ocean ranks among the most widely circulated, influential, and profitable newspapers in the world. It is a worthy example of that vigor and spirit of enterprise which may be said specially to characterize the American daily newspaper press.

RARE CHANCE FOR ARCHITECTS.

The municipal authorities of New York City have determined to erect a new City Hall, and have issued advertisements calling for designs. Premiums to the amount of ten thousand dollars are offered, to be divided in equal parts, or two thousand dollars each, to the five architects whose designs come next to that which shall be finally selected. The author of the accepted design will be appointed architect, and his reward will be large, as he is to receive five per cent on the first million dollars of cost, four per cent on the second million, and three per cent on all beyond two millions. The politicians who rule New York City have known in the past how to plunder the people out of extravagant sums for buildings, and there is no telling how much they will make the cost of the new edifice; but, doubtless, the expense will be made to rise to several millions. This would form a handsome plum for the successful architect, were it not that, according to all precedents, he will be obliged to share his commissions with the controlling political managers, and keep his mouth shut tight.

THE COMING NAVAL REVIEW AT NEW YORK.

The great naval display in American waters, in celebration of the 400th anniversary of the landing of Columbus and preliminary to the opening of the World's Columbian Exposition at Chicago, will be the pageant next in order. Important war ships from Spain, with the three imitated ships of Columbus, are to assemble in Hampton Roads; also war vessels from Great Britain, France, Germany, Russia, Italy, Brazil, Argentina and other nations. The American navy is well represented. The great fleet is expected to sail from Hampton Roads on the 24th inst. and to reach the Bay of New York on the 25th.

On the morning of the 26th the ships will steam up the bay and enter the Hudson River, making anchorage in two lines directly opposite the city, extending from 30th Street on the south to 90th Street on the north, a distance of three miles. This will cover the major portion of the beautiful Riverside Park, which adorns the edge of the river and reaches from 72d Street to 125th Street. On the New Jersey or west side of the river are the high cliffs known as the Palisades. Fine views of the maneuvers will be here obtainable.

On the morning of the 26th an interesting ceremony will also take place pertaining to the inauguration of a statue to John Ericsson, which is to be placed in the beautiful Battery Park, at the extreme southern point of the city, where the waters of the Hudson and East rivers meet and flow southerly into the Bay of New York.

Ericsson was, in a certain sense, the father of iron-clad war ships. In connection with the statue inauguration there is to be a grand parade on Broadway.

On the day following, April 27, a grand naval review will take place. The President of the United States and many distinguished members of the government, foreign ambassadors, and prominent visitors will take part in the affair. Among them will be Don Christobal Colon de la Cerda, from Spain, who is a lineal descendant of the Great Admiral. Elsewhere we give his portrait.

The President and party, amid the thundering of great guns, will embark on the war steamer Dolphin, and move up the river, between the two lines of war ships. Each vessel, as the Dolphin passes, will fire a salute of twenty-one guns. After passing through the great fleet, the Dolphin will come to anchor, and the President will hold a reception for the commanders of the various vessels, after which, the President will disembark; and at this moment each of the great ships will deliver another thundering salute of twenty-one guns. The festivities of the day will close with a grand ball at the Madison Square Gardens, where fifteen thousand people may be easily entertained.

On the following day, the 28th, Broadway will be the scene of further festivities, taking the form of a grand parade of soldiers and sailors, to which many

of the war ships will contribute quotas of men. The line of march is to be from the beautiful Italian statue of Columbus, at 59th Street, the entrance to Central Park, down Broadway to the City Hall, a distance of five miles, where the governor, the mayor and the civic authorities will receive and entertain the honored guests.

This will be the greatest naval demonstration ever witnessed in the new world and will form a fitting prelude to the opening ceremonies of the World's Columbian Exposition, which take place at Chicago on May 1.

CANNONADES FOR RAIN MAKING.

Incidentally connected with the great naval review which takes place before the city of New York on the 27th, it will be interesting to notice what, if any, meteorological effects are produced by the great cannonading which is to take place. Some forty ships, nearly all carrying great guns, are to deliver double salutes almost simultaneously; and if there is any virtue in concussion as a means of artificially producing rain, then New Yorkers may look for a deluge soon after the last gun is fired. April is the month for natural showers in this vicinity. But should it be a clear day, with no signs of rain until the opening of the cannonade, and rain should then fall, it would be a decisive point in favor of the rain makers.

Curious Examples of Fires.

The Railway Review has collected some curious examples of the way in which fires may be set. In one instance, where some waste, which had been used with mineral oil, had been thrown into a safe place, an insect crawled through it, and then, carrying some pieces of the oily fiber sticking to his body, made his way to a gas jet. The cotton fibers which adhered to him caught fire, and he dropped, blazing to the floor, setting the building on fire. In another case, a quantity of waste was said to have been ignited by the friction of a belt running close to it. This, however, may be considered doubtful. The friction of a belt against soft cotton is by no means of a nature to produce great heat, and a much more rational explanation is to be found in the supposition that an electric spark passed from the belt to some conducting substance through the cotton, which it ignited on its way, as sparks of frictional electricity can easily do. In fact, the electrical effects accompanying the running of large belts are quite important, and it is probable that more than one fire has been due to them. Sparks can be taken by the finger from almost any large belt in motion, and we have known a case where an ingenious engineer, by fixing a metal comb near the belt, succeeded in drawing off enough high tension electricity to enable him to light the gas jets in and about the engine room without matches by simply touching them, after turning on the gas, with a wire connected with the comb.

In two cases destructive fires have been caused by water. In one of these a flood caused the water to rise high enough in a factory to reach a pile of iron filings. The filings, on contact with the water, oxidized so rapidly that they became intensely heated, and then set fire to the neighboring woodwork and the building was destroyed. In the other case, the water from the engines, during a fire, found its way into a shed containing quicklime, and the heat generated by the slaking of the lime set fire to the shed, and this to other buildings. Quicklime fires, however, are not uncommon. Many vessels carrying quicklime have probably been burned by the admission of water to the lime through a trifling leak, and no architect or builder needs to be told how intense the heat of slaking lime may be. Glass globes, which act as lenses, often set fires, and it has recently been claimed, on high authority, that the convex glasses used in sidewalk lights are dangerous, and should be abandoned in favor of lights with flat tops. As the convex glasses receive and transmit much more light than the flat ones, particularly in muddy weather, it seems hard to be obliged to give them up, and perhaps a lens might be made convex on the outside and concave on the inside, the concavity being equal to or greater than the convexity, so that rays of sunlight would either pass through unchanged in direction or would be dispersed instead of being concentrated, so as to unite the advantages of the convex form with complete security.

Zinc in Wool Dyeing.

The evil influences of copper vessels in wool dyeing can be avoided by placing in the dye bath a number of strips of zinc just touching the copper vessel. The two metals form an electrical couple, the copper is prevented from passing into solution, while the zinc which takes its place exerts little or no influence on the tint which is being dyed. The zinc gradually corrodes, but is easily replaced. One other advantage is that the copper kettle, not being acted upon by the acid liquors, lasts longer, a point of no little importance considering the high price of copper. This little improvement is likely to prove of great advantage to wool dyers.