THE OMAHA DAILY BEE: SATURDAY, JUNE 15, 1907.



first platted blocks in Omaha each have a frontage of 264 feet, and the streets are last one and a half knots took about 7,000 100 feet wide. The Lusitania, from bow to indicated horse-power additional. To make keel overhang, would stretch over two blocks, two intervening streets and part of the third street, or from the southeast corner of The Bee building, Seventeenth and Farnam streets, to within eighteen feet of the sidewalk line on the southeast corner of Fifteenth and Farnam streets.

Bome idea of their tremen

Sixty-seven years have now elaosed since the Britannia, pioneer vessel of the Cunard line, first crossed the Atlantic, relates the New York Times. From that early vessel to the new turbine racers is a far cry. The evolutional progress has been gradual. but steady-and how great the advance has been may be realized by the statement that each of these twenty-five-knot steamers will be from twenty-five to thirty times the gross tonnage of the Britannia, and eighty-five to ninety times the power. But apart from size and speed and appointments these yessels attract universal attention on account of their rotary or turbine engines. These will enable the new flyers to make the voyage between Liver- ployed at least three 20,000 horse-power enpool and New York in a little more than gines would have been necessary. one-third of the time occupied by the Britannia, while along any one of their bine engines of about 70,000 indicated horseturbins-driven shafts will be transmitted power, driving four shafts, each of which is fitted with one three-bladed propeller of six times the total horse power developed by the engines of the whole ploneer Cunard are each connected with a high-pressure et of four steamers.

turbine, the inner shafts being rotated by Equipped for High Speed. the low-pressure turbines. There are twen-Both of the new steamships have been ty-three double-ended and two single-ended built for high speed, and although it is bollers, and 192 large furnaces. In all, the not accurately known just what they can turbines will contain about 2,000,000 blades, to, it is confidently expected by the comand these will rotate four shafts, the united pany that their enormous horse power will length of which is close upon 1,000 fest, give them a sustained sea speed of twenty! with a weight of about 250 tons, each shaft five knots an hour. This exceeds by nearly carrying 17,000 or 18,000 indicated horsetwo knots any average ever maintained

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by a transatlantic liner in a race across The Lassitania is to have accommodations



11,085 indicated horse-power. The next two with the navigating bridge, which is placed size may be gained by comparison. The and a half miles required a further addition 110 feet above the koel. of 5,300 indicated horse-power, while the With the vessel's enormous length would seem that when the bow reached port it might be advisable to employ the the showing even more startling it may be telephone to convey the fact to the stern. stated that to gain the last knot took just In a comparison that was made when about as much power as was needed to develop a fifteen-knot speed in the ship. To increase this cruiser's speed, therefore, from ten knots to twenty-three knots, 230 1907 rate of increase in stamship dimen- call to public duty. Within the last week per cent, required an increase of more than thirteen times the horse-power, or an advance of 1,334 per cent, the per cent of increase of power being just about six times the per cent of increase of speed.

The extra knot and a half which the pool in about thirteen hours. The vessel involved. Cunarders are to make over the Kaiser would be nearly a mile in length and Wilhelm II, the North German Lloyd's champion on the transatlantic race course, SCREETE. made necessary the installation of sixty-In comparing the Lusitania with other the young man,

eight additional furnaces, six more bollers. vensels a favorite standard is the 52000 square feet of heating surface and leviathan of Brunel, the Great Eastern, an increase of 30,000 horse-power. Nearly 100 feet of additional length were needed, solved in its construction many of the He had no time to "talk politics." and sixteen feet more beam were necessary and have had to grapple. The Lusitania far ex- the movement which gives every promise an increase of 12,000 tons in displacement was needed. If turbines had not been emceeds the Great Eastern, as the following of making him the next president, but the table shows: The Lusitania will be propelled by tur-

Length (feet) Beam (feet) Displacement (tons) .2,700 pulsion 18 Ned (knots) 18 manganese bronze. The outermost shafts *--- paddle, screw and sail. 1--- quadruple

The Great Eastern was an experiment. but there is nothing experimental about these new Cunarders. TASK OF MONEY EXPERTS

Days it Would Require to Count the Fortun of Big Millionaires. 所属的行用作

If the wealth of the rich men of the inited States could be reduced to national bank notes it would not be as great a task for the nineteen expert money counters of the United States treasury to tally and set the amount down in books as the average they consider whether their country does man thinks it would. Working in the leisurely fashion the government permits, it would take the nineteen experis a little country by being a good citizen. That is old fashioned lamps and candles, the modmore than fifty-two days to ascertain the exact number of Rockefeller's dollars. Assuming that Weyerhauser, the head of the lumber trust, has \$660,000,000, the count of his wealth would be completed in just about the length of time it rained during Noah's yachting cruise.

Say J. Pierpont Morgan and Andrew Carnegle each own \$250,000,000, the count of their and would be completed in twenty-four days. All the vast horde of poor millionaires having about \$15,000,000 would get on a day's attendance. Those having less than \$14 500,000 would be dismissed in six hours. These figures are the result of a count made of the "unused" money in one of the vaults under control of William B. Ridgely, comptroller of the currency. The count was finished in a few days, having been under way twelve working days. For six years there has been no count of the money in the vault, and it occurred to Mr Ridgely that he ought to satisfy himself that the \$176,000,000 the books showed to be in the vault was actually there. The count showed that there were as many dollars in the vault as the books said there should be. Thirty-eight years ago a negro stole p package containing 1,500 sheets of unsigned bank notes. He had a high time signing the names of the president and cashler of the bank for which the notes had been engraved. Congress appropriated \$5,000 to pay for the spurious notes issued by him to innocent persons, but only \$125 worth of

the forged notes ever came to the treasury for redemption.-New Yors Press.

Bee Want Ada for Business Boosters.

tempted away by repeated offers of what he did want and

question of the young man and political

duty is far too important to be turned

aside from, no matter when it is

Call for Strong, Young Men.

that they could do that work well.

Commendable Ambition.

warm with ambition to be of those

It

45.000 called up.

college

not

sure to seek it

1-25

probably still above all things desires- every hand for men to distinguish thems place on the supreme bench. The whole selves by services of eminent value. As to rewards. I do not talk of re nation honors him as the greatest exwards. For the class of men to whom emplar of the patriot who serves his country in the exigencies of peace in the would have the idea of public service apsame uncalculating spirit and full devo- peal, the matter of rewards would be irthese two vessels were first contracted tion that the soldier is expected to show relevant. There are no fortunes to be for some interesting calculations were in time of war; a man who stands for the gained. In many instances there might be made, which showed that if the 1807 to interpretation of public office as a solemn few great honors to be won. But is there no satisfaction in being of the number of sions should be maintained for the next even the publication of correspondence those who are living their lives peculiarly hundred years, the ship launched at the between the White House and the Philip- in their country's life? Is there no inend of the next century would have a pines has proved anew how slight a re- spiration in the sense that one is helping speed of 6,527 miles a day, and would be gard Mr. Taft has for his personal for- to do the big things-the things that count, able to cross from New York to Liver- tunes when a question of public duty is that last, that go into history? Or rather is there anything in the world that com-So that the secretary had a right to pace pares with the joy that rises in the heart

would have accommodations for 33,000 pas- the room and deliver himself with ges- of him who knows he has a part in those tures as he discussed the country's call to things?

York Times.

"I say to you that there are rewards which are unknown to him who seeks only Mr. Taft had just returned to Washington from a week's visit to Ohio; arrears what he regards as the substantial ones, which brought out before its time yet of work must have been awaiting him. The best of all is the pure joy of service. To do things that are worth doing, to be problems with which marine architects could not be tempted to a word regarding in the thick of it, ah! that is to live."-New

> MEANS OF MEASURING LIGHT Some of the Systems Employed in Finding Out the Efficiency of Gas.

"It has many times been remarked," What does it mean when we say that gus said Mr. Taft, "that much of England's is required to be of a certain candle poweradministrative success, in municipal and twenty-two in New York, sixteen in Boston, in imperial affairs, has been due to the fourteen in London and fourteen and sixexistence in England of a class free by teen in other English cities? The idea of most people on the measuring of light are birth from the need to labor and, indeed, forbidden to do so, but expected to enter extremely vague. Obviously, light cannot the country's service. Now, we do not be dipped up with a quart cup or laid want and could never possibly have a alongside of a yardstick, and rule of thumb governing class here. But if it is a would hardly be a reliable way of deciding fact that a considerable number of young the amount of light to which a great city Americans are nowadays annually leaving is entitled. Yet until a comparatively few years ago it was more rule of thumb than whom necessity does not require that they should give their time anything else that did decide this important to bread winning, is it not also a fact question. Even a casual examination of that the loud voice of public opinion the comparative size of the gas pipes in should require of those young men that the old houses and the new of this city will show that our forebears were content with not need them? Oh, we may talk of a less satisfactory gas service than we. culture and books and of serving the though, doubtless, in comparison with the

very well. But good citizens need to ern gas jet of the 50's seemed brilliant beknow where their polling place is, and yond words. need to feel the obligation to do jury In these days, however, there is no guessduty, and need to be acquainted with the work about the measuring of light. It is affairs of the municipality and the country. gauged as carefully and accurately as a and need to offer themselves for definite dainty lady's ribbons or a physician's prework in the municipalities or the state scription. The systems by which gas is or in the dependencies, if they believe measured have all grown up within two

generations. Photometry-the measuring of light-is a "I am disposed to insist very positively upon this point: that the young man who science all by itself. The encyclopaedia is wealthy enough to be free from anxiety. will tell you that light is measured in this as to his own comfort and his family's way:

owes it to society, and should be made by "If a point source emits in all directions public sentiment to feel that he owes it to a 'quantity of light' M, its intensity is society, to devote himself to public agsaid to be M-4; 1. c., the quality of light fairs. He is failing in his duty if he does going out through a unit solid angle. This intensity is written 'L' A small surface of area 'A,' at a distance 'r' from the point source and inclined to the line joining it to 'Seek office? Why should he not seek the point source so that the angle beoffice? What is there wrong or objectiontween this line and a line perpendicular to able in a good man's seeking office, when

the surface"he feels himself competent to discharge its And so on, and so on. duties, is conscious of having a high idea

But that, to the average mind nonscienof its responsibilities, and finds his heart tific, is not intelligible. It is much more whom his country's honor is confided? He interesting to see how the thing is actually may be sure that men less well qualified done

In laboratories of the gas company there and with lower ideals than himself will be is one room set apart for the photometric "Assuredly there is a career in the pubappliances. It is dark as one searches for lic service. One may not prophecy for every man commendably ambitious to enter comparisons-as Tophet. Everything in the room is painted dead black, and there it that he will end an ambassador, but is not a bit of bright metal work anywhere there is abundant opportunity for useful to catch the light.

work. A good head and good health are Along one side of the room stretches a necessary, with the disposition to work high table, with a gas jet at one end, and and work hard. There are opportunities on at the other end two standard candles or

a lamp of the exact intensity of light figure of the star on the disk is invisible when the two sources of light give equal which is to be used as a standard. Between the gas jet and the candles or illumination on the disk, and the light on one side going through the disk and on the standardized lamp runs a horizontal bar, on which is a graduated scale, and on this other being reflected from its surface. On this sighting box is a hand or pointer. bar rests a movable sighting box. which indicates on the graduated scale In this box are two mirrors set at angles on the horizontal bar the ratio of the gas so that a disk placed between them, and whose plane is in the line of vision, is light to the standard.

In order to correct any inaccuracy of visible in each mirror-i. c., both sides of it the readings ten are taken of both the can be seen at once. The disk consists indicated candle power and the gas conof two kinds of paper forming a star, the sumption in consecutive minutes, and the difference in thickness of the papers alaverage of these ten one-minute readings lowing light to pass through the thin mais used in making the final computations terial and be reflected on the opaque one, Where candles are used they are carefully so that some of the light passes through weighed before and after the test, to the disk from one source of light and is insure the accuracy of their standard. Each flected from the face of the other disk candle must consume at the rate of 139 by the other source of light. Thus, the ingrains of spermaceti per hour.-Gas Logic tensity of the two sources of light are in

juxtaposition, and when the sighting tox If ya have anything to trade advertise containing the disk is moved to or from it in the For Exchange columns of The either source of light it is found that the Bee Want Ad page.

the second design of the second day is the



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