

### BRITISH POLITICS.

British constitutional usages have at last compelled Mr. Gladstone to relinquish his hold on the Government of the Empire, and accordingly the Seals of office have been transferred for the time being to the Conservatives under the leadership of the Marquis of Salisbury.

The period of time under which the new Government may necessarily act is very short because a general election has to take place in November. Still some party must keep the machinery in motion and in so doing be responsible to the people.

It is to be hoped that during the short time the Conservatives have to rule they will do so wisely and receive the support of all shades of politics, especially the Liberals, who have through Mr. Gladstone pledged the necessary support on general questions.

No one will deny that the Salisbury Government have a difficult task in hand in as much that they are entirely on sufferance. Although guided by high and patriotic motives in accepting the situation during an hour of peril brought about by the unpopularity in the house of the Childer Gladstonian Budget, perhaps it would have been better had a direct appeal been made to the country and thus establish a permanent Cabinet.

### BRITISH ARMED CRUISERS.

It appears that the Admiralty have at last decided to buy outright the Steamship *Oregon*. This ship is among the fastest afloat and was lately fitted up as an armed cruiser.

The above shows in a small degree the latent maritime power of England, which can call into requisition a fleet the speediest and most powerful afloat, built especially under the Government rules to suit various requirements.

### THE "STILETTO'S" SPEED.

Considerable interest has been directed towards the small steam yacht *Stiletto*, which lately outrun the invincible and speedy Hudson river boat.

The remarkable coincidence is that the *Stiletto* was designed by a blind man, but it must not be forgotten that there are boats afloat and on the Ships now in Britain which could leave the *Stiletto* far behind in a race.

We publish a letter from Mr. A. Taylor who claims the discovery of a certain geometrical truth and leave our readers to question or decide as to its originality, because we hesitate in such a field to say off handed whether or not Mr. Taylor is right or wrong as to his claim.

Mr. Taylor deserves credit, however, in trying to solve such a difficult problem as the tri-section of an angle less than  $90^\circ$  because as we read it, this is practically his contention. We give an illustration by construction as we consider Mr. Taylor has not made his points quite clear and besides has introduced useless and extra lettering, etc.

R H T is the given Isocetes triangle, of which A R is drawn at right angles to R T—the problem being to divide the exterior angle A R H into two parts one

of which will be double the other. Draw O H parallel to A R and with R as centre and R O as radius equal to the sum of three sides of the given isocetes triangle cut H O produced in O then join R O—the line R O will be found to fulfil the conditions stated above.

The same construction will suffice where the base of Isocetes is zero.

Hoping the above will throw some light on the subject to our readers.

### OUT-DOOR GAMES PLAYED UNDER ELECTRIC LIGHT.

An interesting and novel spectacle was witnessed by a large and appreciative crowd lately in Toronto, viz., that of a football match played between 9 and 10 in the evening under the electric light. It was found by actual play that with a dozen good are lights suitably located round the field, everything was nearly as easily distinguished as in broad daylight. An important change, however, was found necessary, in that of painting the football perfectly white.

The above deviation will no doubt be found useful, because sports, games, and matches may be played during the cool of the evening in the hottest seasons, and at a time when the public generally can more conveniently attend.

The addition of a band and other musical attractions will do much to popularize these evening out-door entertainments under electric light, especially during the summer seasons.

### A RAY OF LIGHT IN THE FOG.

The cost of production is cheaper in England than in Germany or France. The proof of this is found in the fact that the wages per hour are highest in England. It is not necessary to show, for it is too well known, that daily wages are higher in textile industries in England than on the continent; add to this the difference in working hours, and the superiority of the English workman together with cheaper cost of production, is very marked. At present the hours throughout France in textile industries are rarely, if ever, under 12 a day, while in Germany they are still longer, being 13 at Dusseldorf, 14 to 15 at Treves and Aix l.-Chapelle, and even 16 in Franconia—this, too, without deductions for Sundays and holidays. A commission in France has had under consideration the advisability of shortening the hours of labour, but cannot recommend it because of German and English competition. Some befogged writers on trade will be still more confused when they remember that the hours of labour in England are but nine a day on the average in these industries, and that the daily wages are higher than they are in France, where the workmen are employed at least 12 hours a day. On the theory of pseudo-economists, of whom the United States bears a good crop, England ought not to be able to compete with France; the fact, however, is directly the reverse. England pays more wages for fewer hours' labour, because her labour is more valuable than French labour, even working more hours, and because the English cost of production is lower, thereby leaving a greater share of the product to be divided among the workmen. The United States census shows that wages are but 17 per cent. of the value of the product, while materials are 63. There are commonly no less than seven classes of items in the cost of production—management, labour, taxes, materials directly used in the product, accessory materials, repairs, and interest on capital. It seems as if it would take a century yet for some people to learn that there is something in the cost of production besides labour, and that the cost of labour is commonly low when wages are high, and that wages are invariably high in the long run when the cost of production is low.

The smoke from the charcoal works at Elk Rapids, Mich., which was formerly wasted, is now manufactured into chemicals by being blown by immense fans into a purifier, from which it eventually comes in the form of an acid that is clear as amber. From the acid are produced acetate of lime, alcohol, tar and gas. Each cord of wood contains 28,000 cubic feet of smoke; 2,800,000 feet of smoke handled every twenty-four hours is said to produce 12,000 pounds of acetate of lime, 200 gallons of alcohol, and twenty-five pounds of tar.