from the upper deck，are then brought into position， and the vessel is thus secured．Pumping is then con－ tinued until the vessel is raised clear of the water． These adjustable bilge blocks are very bread，and form an unusually firm cradle，which cannot be displaced even when struck by a heavy sea．The lifting pewer of the deck is obtained from the pentoons only，the weight．
eight
The special feature of this deck，from which it has been named，is seen in the next operation，viz．，that of depositing the vessel on the staging．Fig． 3 shセws an end elevation or section of the staging，which is formed of parallel r ws $\bullet$ vertical piles of irøn or tim－ ber，capped by horizontal timbers．These rows of piers，which are erected at right angles to the shore line，are 4 or 5 feet broad，and from 12 to 15 feet apart．T• deposit the vessel，the dock is brought up to the staging，and its pontoons passed between the piers．The keel of the vessel passes clear above the middle line blocks on the staging，the outer blocks being temperarily turned down．As seen as the vessel has been brought over the keel blocks on the staging the dock is lowered，the vessel takes her bearing， the bilge blecks are immediately drawn in in the dry， and the dock is withdrawn，ready to raise or lower another vessel．A few feet variation in the level of the water can always be accommedated by the use of more or less blocking，and vessels of any breadth，how－ ever great，can be raised and depesited with the utmost facility．The operation of lowering a vessel from the staging int the water is necessarily the exact rever of that of raising，which has been fully described．
It will be seen that the depositing dock is specially suitable for large commercial ports where many ves－ sels have to be docked，as one dock can serve any number of vessels：the number of vessels that can be accommodated is，in fact，limited only by the length of staging provided．The deck is very economical in its working，and requires much less pumping to be done than an ordinary stone dock．When a vessel is on the staging，it is fully exposed to light and air，and is in an exceptionally favorable pesition for being painted or repaired．The depositing dock is con－ structed in twe equal portions，each furnished with engines，pumps，etc．，complete，se that each portion can be used as an independent dock for smaller vessels； each portion can alse at any time be docked on the other pertion with七ut any heeling •ver，s• that all parts are readily accessible for cleaning and painting， thus enabling the dock to be kept in the most the－ reugh preservation．The staging can be erected in comparatively shall॰w water，as it is n॰t necessary te have a much greater depth than the draught of the dock with the vessel on it，say from 10 to 15 feet； but where the vessels are raised or lowered，which can always be done at the same spot，there must be a depth equal to the depth of the pontoons added to the draught of the vessel．Vessels can，with advan－ tage，be built on the staging，and lowered into the water at a very small cost，without any relling or sliding motion，and without running the risk of straining incurred by launching．The time eccu－ pied in docking a vessel of any size need not exceed one hour，and in lowering half an hour；a vessel can， of course，be raised，sighted，and refloated in less than two hours．The following are among the chief advantages of the depositing system：1．One dock can accommodate any number of vessels by means of staging，which can be erected along the waste shores of a river or wet dock．2．The dock can take a vessel of any size，and of a breadth toe great to en ter any other fixed or floating dock．3．Each half of the deck is complete in itself，and can be used as an independent deck for smaller vessels，and for dock－ ing the other half．4．Each additional length of stag－ ing provides the accommedation of an additional grav－ ing dock at a very small cost．5．Vessels can be built on an even keel on the staging，and can be lowered inte the water without any strain，avoiding the risk and cost of launching，and saving the space required for a slip．6．The deck，either with or without a vessel，can be towed from place to place，for the pur－ pose of decking and＂depositing vessels at different points．7．The dock cannot sink，even if all its valres be left •pen by accident or intention．8．The deck can at any time be enlarged as eccasion may require at the same rate per ton as its original cost． 9. With sufficient staging，one of these decks can ac－ commodate a very great number of vessels daily， and can，therefore，earn a very much larger dividend than any other form of dry dock．
We may add that in 1876 Messrs．Clark \＆Stand－ field constructed for the Russian gevernment a large depositing deck．The firm have alse constructed a depesiting deck at Barrew，to deck vessels up te abeut 3，200 tons displacement，and alse anether deck for the Russian government，to dock vessels up to about 8,000 tons displacement．－Iron．

THE following is a geod remedy for burns：Mix 4 •unces of the $y$ olk of eggs with 5 •unces of pure glycerine．This forms a kind of varnish．

## Srientifit Ammeniam．

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a new phase in the telephone litigations． It will be seen from an interesting article，with de－ tails，given in eur this week＇s Supplement，that a new and peculiar form of attack has been commenced against the Bell Telephone Company，being a suit brought in the name and at the cost of the Gevernment of the United States to break and annul the original Bell patent．One peculiarity of the case is that the Bell patent．One peculiarity of the case is that the
Attorney－General，by whose authority the suit is Attorney－General，by whose authority the suit is
brought，is，or was lately，deeply interested in the stock f a rival telephone company that will shortly be en－ oined and probably ruined，unless saved by this new legal dedge．Anether curieus feature is that，in this new suit，the Attorney－General has appointed as the lawyers to represent the G•vernment the same lot ef awyers whe have heretofere defended and been paid y the Attorney－General＇s telephone company．Thus， y favor of the Department of Justice，the lawyers of the Attorney－General＇s telephone company will con－ tinue to battle for his interests，but will in future draw pay from the Treasury of the United States．
We are among those whe regard the Bell patent as an illegal monopoly．We believe the lower court， through some misintrepretation of evidence or failure in its presentation，awarded to Bell a discevery that，in truth and justice，belonged to another man．Phillip Reis，in 1860，was the original and first inventor of the electric telephone；he gave the invention to the public in several forms many years before Bell＇s device was made； his inventions were kn॰wn t• Bell；and n•w，at this late day，to have the inventions of Reis wrenched from the eople and converted int a vast monopoly for the en richment of private individuals seems like a meckery f justice．
The manner of its accomplishment is about as $f \bullet l$ lows：In the first suit judge number one，on the mea ger evidence then presented，concluded Reis＇telephone to be goed for nothing，and held Bell＇s patent to be valid．In the second case，judge number twe would not hear additional evidence concerning Reis，as the sub－ ject had been alreadydecided．In the third case，judge number three declined to hear the evidence for similar reasons．In the fourth case，judge number four reaches the same result；he agrees it would not be polite to the other judges te rule differently．Thus the several judges，although only one investigation of evidence has been made，have ranged themselves like se many fences，one behind the other；and the Bell people，in addition to their patents，practically control the art of transmitting speech to the ears of the judges of the lower courts．
Unsatisfactory as this state of things appears，it is， nevertheless，strictly in accordance with legal forms and precedents，and aff॰rds n• shad॰w of justification for the scandalous spectacle which the Department of Justice is now making of itself．
Patentees are interested in this matter without re gard to what they may think of this particular patent of Graham Bell．If the United States will lend its wealth and influence to carry on litigation and encour－ age infringement of a patent sustained by all the cir－ cuit courts，and de this upon alleged defenses which have been passed upen，and in faver of those whe can avail of them in actually pending suits，but whe hap－ pen to have special persenal relations with the Attor－ ney－General，and de this on ex parte presentation of the case，invention and a patent will n longer confer rights，and decisions of the courts can n $\bullet$ longer，sustain nor protect them．

## STILETTO AND ATALANTA．

It will be remembered that early in July it was an－ nounced that the Stilette had won the race ever the ninety mile course from Larchmont to New London． 121 The race was very close，but it was supposed that she 3121 had beaten the Atalanta by several minutes．Mr．Geuld promptly protested against the decision，on the ground that the Stilette，probably by mistake，had left the pre－ scribed course，and near the finish had gone inside in stead of outside of a certain buey．A committee was appointed by the American Steam Yacht Club to in－ vestigate the charge，and after hearing rather a volu－ minous testimony on the subject，decided in Mr ． Gould＇s favャr，and awarded the challenge cup to the Geuld＇s fa
Atalanta． Atalanta
This decision has called forth a challenge from Mr． Herreshoff for another race between the twe steam yachts，©ver a hundred mile course on the Hudsen， from New York fifty miles up river and back again． The proposed stake is a new championship cup， to be held by the winning beat until her record is sur

