FOREIGN SUMMARY-METALS AND MARKETS
The West India Royal Mail Steamship Company has a fleet of twenty steamships, the capacity of which amounts to 44,058 tuns; with engines of 10,630 horsepower in the aggregate. They are also building two new iron-steamers of 3,092 tuns burden each, and said to be as large as the. Persia, which is the premier vessel of the Cunard line.
Quite a number of the British steamers are now using super-heated steam (steam heated apart from the water in the boiler;, and with an economy, it is said, of about 33 per cent. in fuel. The Peninsular \& Oriental Company had applied it to one of their steamships, the Valetta, the engines of which were furnished by Messrs. Penn \& Son, of London, and the results were so favorable that it is expected their whole large and powerful fleet will be supplied with simılar apparatus.
An experiment was lately made at one of the ironworks at South Wales, for testing the effects of hydrogen gas in the pudding-furnace for removing impurities from the iron. This gas was generated from water by decomposing zinc in it, and it was admitted in small streams among the metal in the furnace. It is stated that the iron produced was of a superior quality, and the results obtained were secured in about one-half the time required by the ordinary process. Hydrogen gas has been employed forpurif ying iron in the laboratory, but it has not been applied prior to this on a large scale, because it was thought too expensive.

A steel steamer, called the Windsor Castle, one hundred and ninety feet long, twenty feet broad, and seven feet depth of hold, has been built by Messrs. Caird, of Greenock, Scotland, and it is so light that it only draws three feet of water. The hull, boiler, paddlewheels, and considerable portions of the engines are all made of steel. She has run at the rate of twenty statute miles per hour. This is certainly a curiosity of a steamer. Her two engines have cylinders of forty inches in diameter, stroke sixty inches, and the steam is cut off at twelve inches. The wheels have feathering-paddles; the boiler is a tubular upright, and the steam used is super-heated.
Quite a controversy has been going on in the London Engineer, between H. Hyde and several anonymous correspondents in regard to the merits of the Hughes Tele graph, and the other kinds now in use in England. Mr. Hyde is the champion of the former, and he dares all those who oppose him to a practical test of the several telegraphs. It seems that Mr. Hughes has experienced much opposition to the fair testing of this telegraph by those who have patents on the instruments that are now in use.

## prices of foreign metals, june 17.



The prices are about the same as last week. There has been a very limited demand for Scotch pig-iron, in comparison with that experienced at the same season last year.
American common resin was selling at four shillings per barrel.
For these commercial statistics we are inadebted to the London Engineer and Mechanics' Magazine.

## New York Markets.

Cosic.-Liverpool cannel, $\$ 896$ per tun; Newrcastle gas, $\$ 725$, delivered at the gas-works; Anthracite, from $\$ 450, \$ 475$, to $\$ 5$.
Corton.-The market has been quiet, with a fal of one-fourth of a
cent from last week's prcc a Good ordinary Upland, Florida and ent from last week's prce \& Good ordinary upland, Florida and
Mobile, 10 a 4 .; Texas, $10 \%$. There is not much disposition to buy or Mobil.
sell.
cher
Coprer.-Lake Superior ingots at 21 c . per 1 lb . for cash. Copper bolts, 30 c . A slight fall from last week.
HEwP.-In St. Louis-our American hemp depot-the prices have been ranning from $\$ 95$ to $\$ 103$ per tun for lower qualities. Sonie choice brands have been sold for $\$ 160$.
ReN -AMerican very moderate sales. Anthracite pig at $\$ 21, \$ 22$ and $\$ 23$ per tun,
according to the brands. Lead.-Pig is quiet, an Gallena at $\$ 570 ; 55$ tuns Spanish, $\$ 5622 \%$, cash, and $\$ 570$, four months Galenat ; and 100 tuns refined German, $\$ 953 \% \%$ cash.
Leatier.-Oak tanned sole, light, 31c. a 34c. per lb.; Philadelphia and Baltimore (made from slaughtered hides), 32c. a 35 c .; Hemlock, tanned dry hides, $22 \nsucc \mathrm{c}$. a 30 c .; Upper leather calf--skins, 5sc. a 65 c .;

Hemlock, 42c. a 65c. Hemlock sole continues at good request, and with a moderate stock, prices are maintained. The demand for Oak sole continues to exceed the supply, and prices are without change Eacmeled, light, 16 c . per foot; Enameled, heavy, 12 c .
25 c a 28 c . per 1b. ; English sumac shecpskins, 20c. a 22 c .
Lumblr.-Eastern pine and spruce at $\$ 12$ and $\$ 15$ per M. , ac ording to qualities.
Nalls.-Cut are quiet but steady at $33 / \mathrm{c}$ c. a $3 \frac{3}{4}$ c. per 1 lb . American clinch sell in lots, as wanted, at 5 c . a 6 c . (according to the kind, \&c.), six months.
Resin.-Brown (for Liverpool), $3,600 \mathrm{bbls}$, at $\$ 1821 / 2$ per bbl. of 310 ibs.; white, $\$ 250$ a $\$ 4$; very pale, $\$ 550$ per bbl. of 280 lbs .
Speliter.-Silesian, at 5 3-16 cents per 1 lb .
Tin.-Plates are in ample stock. The transactions are comparatively limited, though they have been larger than for some time past. The sales are 2,000 boxes $1 / 3 \mathrm{~d} \mathrm{X}$ supposed $\$ 93736$ a $\$ 950$; 300 I . C. Coke, $\$ 731,4 ; 1,000$ Charcoal 'Terne, a shade under $\$ 850$, six months; and
300 I . C. Charcoal, on private terms. Block is dutl. Banca at $31 \frac{114}{} \mathrm{c}$. ash. English, 29ねㄷ.
Turpentine from 45c. to 46 c . per gallon in large lots, and $471 / 2$ in mall lots.
ZINC at $7 \%$ c. a $73 / \mathrm{cc}$. per 1 b ; the latter price being from stores.
The foregoing rates indicate the state of the New York markets up to June 29.
lumber prices at albany.
The Albany Lumber Market is, next to Chicago, the greatest in our countre, and the prices ruling in that city, together with the supply on hand, are of interest to a large portion of our citizens. The assortment on hand is very good at present, the demand is moderate, and the Theceipts are the same.
The receipts for the week ending June 29 were boards and scantling 8,567,000 feet; shingles, $955 \mathrm{M} . ;$ staves, 2,799,700 lbs.
The following is a list of the prices :-

 I claim the arrangement of the hopper, $c$, and arms, $i{ }^{\prime}$, in combina-
tion with the inclined equalizer, $h$, the whole being constructed sub-
stantion stantially as and for the purposes set forth
24,531.-Wm. Beaumont, of Paterson, N. J., for an Improvement in Gas Retorts:
I claim making all that part of a retort which is most subject to ex-
pansion and contraction, corrugated to prevent fracture, as described.
24,532.-Edw. Beck, of Allentown, Pa., for an Improved Contrivance by which the Workman operates Scroll Saws :
I claim the oscillating platform, L , connected with the ghaft, $\mathrm{C}, \mathrm{by}$ means of the straps, h h, and pulley, $D$, or their equivalents, the arm
E, pitman, F , and spring, T ar anged for joint operation, substantially
as and for the purpose set forth. as and for the purpose set forth.
[This inven
This invention relates to an improvement in that class of sawing. machines which are designed for sawing small work, such as scrolls The invention in and The invention consists in the peculiar means employed for operating the saw, whereby the operator may drive the saw, and at the same
time have perfect control over the work, so that it may be readily manipulated and properly presented by him to the saw.]
24,533.-Henry Betts, of Hamilton, C. W., for an Im provement in Railroad Bars or Rails:
I claim the angle rail, in combination with the outside bar where
the space between them is filled in with cement, prepared by boiling sand and conl tar in such proportions as will best resist the action of

24,534.-M. B. Bigelow and Anson Hardy, of Boston, Mass., for an Improved Fireproof Desk :
We claim the moval le table, d , or any device essentially the same, in combination with the fire-proof case, a a a a, said table being con-
structed and made os as to operate in the manner substantially as and We purposes specified. $f$, or any device essentially the same, in
for the com supporting or assisting to for supporting or assisting to support said movable table, whenever
said table is drawnout to the position shown in Fig. 2 , said slide and
table being connected and made so as to operate in the manner and table being connected and made so as to operate in the manner and
for the purpose substant ally as specified and show.
We an for the purpose substant ally as specined and shevice substantial y the brackets, q q or any device
We also
same, In combination ith the fireproof case, a a a, for supporting or same, In combination ith the freproof case, a a a for supporting or
assisting to support the movale tatle, d, and the slide f, in the man
ner and for the purpose substantially as shown and explained. 24,535. - Nelson Birdsall, of Port Jervis, N. Y., for an Improved Spring Hinge :
I claim the combination and arrangement of the spring, $E$, and ad-
justing piece, $G$ and $H$, applied to a hinge, as described and specified. I as so claim inserting within the spiral spring, E, the tubular spring,
I, described, for assisting the action of the spiral spring, and preI, as described, for asgisting the action of the spiral spring, and preventing it from setting.
set forth and specified.
24,536. - L. E. Burdin, of Paris, Ky., for an Improvement in Plows :
I claim the arrangement of the beam, $M$, the handle.s, $N$, the stan
dard, $K$, brace, $H$, hhare, $\mathcal{B}$, landeide, $F$, cone, $A$, spindle or shaft
 24,537.-Alexander, William, and James Campbell, of Harrison, O., for an Improvement in Corn Planters We claim the described arrangement of the inclined slides or valves
$\mathrm{H}^{\prime} \mathrm{H}^{\prime}$, levers, $\mathrm{J} \mathrm{J}^{\prime}$, adjustable rods, o o, and cam weeel, k , for the 24,538.-J. A. Campbell, of New Orleans, La., for a Job and Card Printing Press :
I claim fastening the cylinder permanently on its solida $x$ ie, $F$, and also fastening the ends of this axie securely into the slides, $F$. I also claim, in combination with the cylinder, L, the revolving of
the roller frame, H, on the polid axle, E, asite working center, while
the ave itself does not revolve, either by eccentric wheels, which are the roler fane,
the axle iself doe s not revolive, either by ece entric wheels, which are
to be used when the cylinder vibrates, or by plain ones when it is Itationary,
I also claim the eccentric wheels, $G$ and $G^{\prime}$, in combination with
the cylinder, $L$, for the purpose specified. the cylinder, $L$, for the purpose specified.
I also claim the cranks, $R$ and connecing rods, $D$, in combination
with the cylinder, $L$, the inking frame, $H$, and the eccentric wheels, I also claim the cranks $l_{\text {, and connecting rods, }}$, in combination
with the cylinder, $L$, the inking frame, $H$, and the eccentric wheels,
$G$ and $G$. II also claim the combination of the cranks, $S_{2}$, the connecting rods,
$T$, the slots, $Y$, the pins, $W$, and the bottoms, $X$, with this press, as T, the slots, specified and described.
24,539 - W. J. Cantelo, of Burlington, N. J., for an 24,539.-W. J. Cantelo, of Burlington, N. J., for an Improvement in Stoves :
I claim the exterior casing, A, and inner adjustable casing, H , in
combination with the firepor, F , and cone-shapend
several parts are arranged, substantially as and forthe purpose set severa
forth.
24,540.-T. F. Christman, of Wilson, N. C., for an Improvement in Machines for Hoisting Bricks :
I claim the combination of the rollers, D D, with the saddle and

