

instituted several experiments with the view to ascertain what strength of the solution would successfully resist ignition into flame, the following are the results :

1st.—The Hard Woods, such as African, Dantzic and English Oaks, are not much affected by the solution in respect of ignition into flame, whatever be the strength of the solution.

2d.—In the case of the ordinary strength (1 lb. of the Chloride to 4 Gallons of Water,) the prepared and unprepared Woods are very nearly alike.

3d.—In solution of 1 lb of Chloride of Lime to $1\frac{1}{2}$ Gallons of Water, and do. to 2 do., we found that certain Woods when exposed to the immediate contact of Iron, heated to a *Blood Red Heat*, did not at all ignite into flames, whereas unprepared wood of the same kind burst into flame immediately.

THE FOLLOWING ARE THE WOODS.

1 lb. to $1\frac{1}{2}$ Gills. of Water.

Dantzic,
Spruce,
Polish Larch,
Scotch,
Yellow Pine,

1 lb. to 2 Gills. of Water.

Spruce Deal,
Polish Larch,
Riga Fir,
Yellow Pine.

The same kind of Woods were boiled in solutions of
1 lb. Chloride to 2 Gallons of Water.
Ditto 2 Ditto.

and in both cases the prepared Woods successfully resisted ignition into flame, while the unprepared burst instantly into flame.

The following is the comparative expense of fitting the Bulkheads of the hold of a line-of-battle-ship, with ordinary timber unprepared, and with Yellow Pine and Riga Fir, prepared with solution of one lb. Chloride to 2 gallons of Water.

Bulkheads, &c., in hold of English Oak—3 in. thick, 2,760 cubic feet, at 7s. 6d. per foot,		£966	0	0
Do. Yellow Pine, 3 in., 2,760 feet, at 2s. 4d.,	£322	0	0	
Solution,	243	0	0	
Labor,	12	18	0	
				577 18 0
Difference in favor of Yellow Pine,				388 2 0
Bulkheads, &c., in hold of Riga Fir—3 inches, 2760 Cubic feet, at 3s.	£414	0	0	
Solution,	220	0	0	
Labor,	12	18	0	
				646 18 0
Difference in favor of Riga Fir,				319 2 0

We have, &c.

(Signed) R. BLAKE,
J. WATTS,
J. OWEN.

53, King William Street, London Bridge, 13th August, 1845.

SIR,—

In obedience to your desire, I beg to inform you that the cost of preparing Timber for building purposes, if it be desired to preserve it from dry rot only, will be from 9s. to 13s. 6d., per load, according to the greater or lesser absorbent properties of the Wood.

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