## improvea rigaed oars

Men who paddle their own canoes, in popular phrase, often do it with a reckless disregard of the consequences. With the old-fashioned oars and method of using them, it is impossible to see the direction one is going unlese by occasional convulsive twists of the neck which threaten to dislocate it. If a man should ride horse-back, with his face to the tail, he would present an absurd spectacle; yet this is, in effect, what oarsmen of the period do.

The engraving shows are so fixed that the rower faces the bow, and is able to direct the boat to avoid danger or otberwise with great ease and comfort.

The manner in which this is done is so clearly shown by the artist's pencil, that explanation is superfluous.

It will be seen that the oars can readily be shipped aboard at any moment, as at $A$, to avoid collision with the dock or any obstacle, or to slon the boat entirely.
It is claimed that this plan is much easier than the old one-that the capacity of a boat of a given size is greater, that it is more easily steered by the oars, that the oars man cannot make a false stroke or "catch a crab," since the oar is fast and is not liable to turn in the hands, and that the oars may be suffered to float alongside without danger of lesing them; also, that the boat is steadier in a sea-way.
A patent for this invention was obtained through the Scientific American Patent Agency, Sept. 12,

1865, by R. Smith; a working model may be seen by applying to him at No. 189 Front street, Brooklyn N. Y., where, also, further information can be had.

## BPECIAL NOTICES

Martha M. Jones, administratrix of the estate of Samuel T. Jones, deceased, of Staten Island, N. Y., has petitioned for the extension of a patent granted to him on the 24th day of February, 1859, for an improvement in the manufacture of zinc white

Parties wishing to oppose the above extension must appear and show cause on the 5th day of February next, at 12 o'clock, M., when the petition will be heard.

Simeon Savage, of Pomfret, N. Y., has petitioned for the extension of a patent granted to him on the 2d day of March, 1852, for an improvement in machines for printing floor cloths.

Parties wishing to oppose the above extension must appear and show cause on the 13th day of February next, at 12 o'clock, M., when the petition will be heard.

Lewis Lewis, of Vicksburgh, Miss., has petitioned for the extension of a patent granted to him on the 2d day of March, 1852, for an improvement in cotton presses.
Parties rilshing to oppose the above extension must appear and show cause on the 12th day of February next, at 12 o'clock, M., when the petition will bes heard.

Charles Neer, of Brooklyn, E. D., has petitioned for the extension of a patent granted to him on the 9 th day of March, 1852, for an improvement in canalock gates.
Parties wishing to oppose the above extension must appear and show cause on the 19th day of February nest, at 12 o'clock, M., when the petition will be heard.

Nicholas Taliaßerro, of Augusta, Ky., and William D. Cummings, of Maysville, Ky., have petitioned for the extension of a patent granted to them on the 30th day of March, 1852, for an improvement in smoothing irons.
Parties wishing to oppose the above extension must appear and show cause on the 30th day of March next, at 12 o'clock, M., when the petition will be heard. John M. Thatcher, of New York City, has peti-
ble ot furnishing a larger quantity of mellon, and is the one used in the French serpente. A solution of pernitrate of mercury is readily prectpitated by sulphocyanide of ammonium, and the replearic sulphocyanide may be easily so prepared. Lu best to use the mercurial solution as strong as phor ible, and to keep it in excess throughout the precipitation. So lution of perchloride of mercury is not so easily precipitated as the pernitrate, probably owing to the solubility of the mercaric sulphocyanide in the chlorides.


## SMITH'S RIGGED OARS.

on the 23d day of March, 1852, and reissued the 11th day of Sept., 1855, for an improvement in air-heating stoves.
Parties wishing to oppose the above extension must appear and show cause on the 5th day ot March next, at 12 o'clock, M., when the petition will be heard.

## The Way "Serpents" Exge" are Made.

Mr. C. H. Wood gives, in the British Journal ot Photography, the following directions for making the curious and popular toy, Pharaoh's Serpents:-
"The toy consists of a littleconeof tin foil, containing a white powder, about an inch in hight, and resembling a pastile. This cone is to be lighted at its apex, when there immediately begins issuing from it a thick, serpent-like coil, which continues twisting and increasing in length to an almost incredible extent. The quantity of matter thus produced is truly marvelous, especially as the coil which so exudes is solid and may be handled, although, of course, it is extremely light and somewhat fragile.
"Having a little of the white powder, with which the cones are flled, placed at my disposal by a friend, I submitted it to analysis, and found it to consist o suiphocyanide of mercury. This salt, when heated to a temperature below redness, undergoes decomposition, swelling or growing in size in a most remarkable manner, and producing a mixture of mellon (a compound of carbon and nitrogen) with a little sulphide of mercury. The resulting mass often assumes a most fantastic shape, and is sufficiently coherent to retain its form. It presents a yellow color on the exterior, but is black within. The 'serpent' shape, of course, results from the salt being burnt in a cone of tin foil.
"Both the mercurous and mercuric sulphocyanides decompose in the same manner, but the mercuric salt, containing more sulphocyanogen, seems capa-
" Perhaps I may be excused for adding that sulphocyanide of ammonium, suitable for the above purpose, muy be very easily and economically prepared as fol-lows:-One Nolume of bisulphide of carbon, four volumes of liq. of ammon. fort., and four volumes of methylated spirit are put into a large bottle, and the mixture frequently shaken. In the course of one or two hours the sulphide of carbon will have entirely dissolved in the ammoniacal liquid, forming a deep red solution. When tnis result is attained the liquid is boiled until the red color disappears and is replaced by a bright yellow. The solution is then evaporated at a very gentle heat (about $80^{\circ}$ or $90^{\circ}$ Fab.) until it caystallizes, or just to dryness. The product is sulphocyanide of ammonium anfficiently pure for the oivo purpose. One recrystallization in alcohol will render it quite white.
" One ounce of bisulphide of carbon yields, bs this process, exactly one ounce of sulphocyanide of ammonium."

## TEE SCIENTIFIC AMEEICAN

Is A WEEKLY JOURNAL OF ART, BCIENCE. MECHANICS INVENTION, CHEMISTRY, AND MANDFACTURES. It contalns Practical Information concerning all the Important Industria Operations of the Country, Reports of Sclentific Bocleties, Patent Claims, together with numerous Illustratlons of will int inventions, Tools, and Machinery used in workshops and manufactories. It bas been published for upward of twenty reara, and is admitted to be the moat widely circulated and best paper of the zind now published Two volumes, of 416 pages, commencing January and July, are pu. Two volumes, or
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