## The Water of Ohio.

 Messrs. Editors-Will you do me the personal kindness to state what form of filter or other agent, mechanical or chemical, is, in your estimation, best adapted either to make the well water of this section of Ohio (which is intensely impregnated with lime,) or the rain water (which is unavoidably im pregnated with the smoke and sooty residuum of bituminous coal, which is extensively burnt here) fit for drinking purposes. If my family drink the lime water, their alimentary canal is affected throughout, and digestion consequently greatly impaired.The running water, whether we drink of it or lave in it, is nearly certain to affect the spleen, and produce chills and fever. What shall we do? Can we filter the tinted rain water and make it palatable, by chateoal, quartz, or other process, or will it be more easily done by decomposing the lime in the wells, or shall we be driven to the ultimatum of distillation? Your world-wide repute for omniscience is sufficient guarantee that you can fully answer my queries, and your equally well-known disposition to dispense your treasured intelligence, will constrain you to reply, which I shall expect to read in your next issue.Henry S. Babbit
Newark Machine Shop, Newark, Ohio.
[The passing of the well water through charcoal and sand in a common filter will not remove the lime and soften the water. It is, however, a very good plan for purifying the rain water. The rain water should be conducted to fall upon a cotton clothsuch as Canton flannel-which can be taken out and washed from time to time. Unless this is done, the charcoal will have to be reewed oftener.
Hard lime water can be softened with quick lime. The common hard lime water in some wells and streams, contains carbonate and sulphate of lime. These make the water hard, and can be precipitated by quick or fresh slacked lime, which is a hydrated ox yd. Half an ounce of quicklime stirred in a pan containing nine quarts of water, then thrown into a twenty gallon cask of clear hard lime water, will soften it, by taking up the excess of carbonate and falling to the bottom in the form of cbalk and gypsum. This way of treating the hard lime water of Ohio will render it more fit for washing, and for feeding steam boilers, but we are not sure whether or not it will be rendered any more palatable or healthy. A little sal soda will also precipitate the carbonate of lime and often the water.
There are many substances whichwe know that could beemployed to precipitate all the lime in well water, but then it would be too expensive to use them, and besides, they cannot be used with safety either. The only rational economical system which we can think of for purifying the well water of Newark, Ohio, is by filtration, as follows :Make a long channel or way of cobble stones sand and clay, and conduct the water through it in its passage to a filtering cistern, where it should be made to percolate through fine charcoal and clean sand, and pass from the bottom through an opening into an adjoining open chamber for use.The form of the filtering chamber is of no consequence, it may be square or round ; but the lon ger the conducting channel is, sothat the water receives the greatest amount of agitation among the stones sand and clay, so much the better. The channel should be set upon an incline, and the cobble stones, clay, and sand renewed from time to time.

Foul Linen, Buttons, and Coat Tails.
An exchange paper indulges in the following moral and instructive calculations:
"It has been calculated that the cost of washing linen that might just as well be worn two days longer, amounts to enough in this country to more than defray the expenses of the American Board of Foreign Missions! The expense of buttons worn on the back of our coats, where they are of no earthly use, is equal to the support of all earthly use, is equal to the support of all
our orphan asylums! The value of tails to our orphan asylums! The value of tails to
dress coats (of no value in reality for warmth
cost of our excellent system of common schools!"

Statistics of Fatt mity xisuled in 1853.
Tabular statements of Patents issued during
the year $18: 33$-with the total number of
classes.
each class; the number of each class to in instances where other materials would be each State ; the total number of the class- liable to fracture. Thus the milky juice of es to each State, \&c. Prepared for the a tree (Siphonia and Ficus Elasticus) is Scientific American by T. G. S., of Jersey City, N. J. :


| Maine, | 4 | 1 | 2 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 1 | 0 | 1 | 0 | 21 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| New Hamp. | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 14 | $\begin{array}{llllllllll}\text { New Hamp. } & 3 & 2 & 0 & 0 & 1 & 0 & 0 & 0 & 1 \\ \text { Vermont, } & 4 & 1 & 1 & 0 & 2 & 0 & 0 & 0 & 2\end{array}$

Mass.,
Mass.
R. I,
 Connecticut, $1 \begin{array}{llllllllllllllllllllll} & 8 & 5 & 4 & 0 & 0 & 0 & 1 & 1 & 4 & 0 & 0 & 0 & 5 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0\end{array} 1_{1}^{4}$
 $\begin{array}{llllllll}\text { NewJersey, } & 3 & 5 & 1 & 3 & 2 & 0 & 1 \\ 0\end{array}$
$\begin{array}{lllllllll}\text { Penn., } & 15 & 16 & 3 & 5 & 9 & 15 & 3 & 2\end{array}$
Delaware,
Maryland,
Virginia,
$\begin{array}{ll} \\ \text { Nirginia, } & 10 \\ \text { N. Carolina }\end{array}$

S. Carolina, $0 \begin{array}{llllllllll}0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0\end{array}$

Georgia,
Alabama,
Mississippi,
Louisiana,
Arkansas,
Kentucky,
Tennessee,
Ohio,
Indiana
Illinois,
Michigan
Wisconsin,
Iowa,
Missouri,
Californ
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For
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Extensions,
Additional Improvements,
Re-issues,
Designs,
Grand Total,
$24!$
ork received the highest -
( number of patents, and more than one quar- $11,16,17$, twenty-five, and under fifty were ter of the whole; 250 ; Massachusetts, the issued.
next highest, 135 ; Pennsylvania, 115 -these Thistable will well repay a further inveshree States receiving more than one half of tigation, both by the curious, and those seekthe whole number issued. Alabama, Wis- ing information on the resources, genius, \&c., consin, California, Texas, received each, 1. of the country.
Delaware and Arkansas received none. For- [All our inventors must feel deeply ign Patents issued, 25.
obliged to our correspondent for the labor ed patents in each class, and in classes 1 and formation is very useful, and the work is ably 2, is ahead of all the otbers. Massachusetts accomplished. We hope he will perform received most in class 3 ; Pennsylvania, in class 5. the same good office for the Report of 1854 We do not know any person who can do it
In classes $1,2,3,14,18$, more than fifty

## India Rubber Combs.

In consequence of the numerous applications of iron to the arts in our period, the present is frequently termed the "Iron Age." It is sometimes, too, very properly called the "Age of Steam," and at others the "Age of Electricity." With equal propriety it may be termed the "India rubber Age" The application of this substance to the arts and manufactures are so numerous
that we cannot think of giving a list of them here ; nevertheless, we will mention a few facts relative to this material. When we were at school india rubber was looked upon only as "a curious specimen of a vegetable gum, which bad the singular quality of removing pencil marks from paper." Now this is some thirty summers past; and during that short period india rubber has been
employed for shoes, coats, hats, carriage employed for shoes, coats, hats, carriage
wheels, pipes, joints, \&c., in endless variety.

