

# Scientific American

A WEEKLY JOURNAL OF PRACTICAL INFORMATION IN ART, SCIENCE, MECHANICS, CHEMISTRY AND MANUFACTURES.

Vol. XII.—No. 4.  
(NEW SERIES.)

NEW YORK, JANUARY 21, 1865.

\$3 PER ANNU  
(IN ADVANCE)

## Improved Knife Cleaner.

This knife cleaner is intended for hotels, steam-boats, boarding-houses, saloons, or large private families, where many knives have to be cleaned in a short time. It is now in use in most of the city hotels and large restaurants, and is certified by the proprietors of them to be a very excellent machine. It cleans from six to a dozen knives at once, according to size of machine, in a very superior manner. The machine consists of a box, A, for holding the knife frame, polishing powder, and brushes. The knife handles are placed in stocks, B, and have their blades resting on a cushion, C. The lever, D, is then brought forward, and by means of the cam-shaped toe, E, it holds the handles firmly while the blades are being polished. This latter is effected by the brushes, F, seen at the side. One of them is for applying moist polishing materials, if necessary, and the other for giving the final luster. The pawl, G, catches in the rack, H, and holds the lever up so that the knives cannot slip while being operated on.

When one side of the blades has been thoroughly cleaned, a movement of the handle, H, reverses them, so that the other side is in position to be cleaned.

This machine is durable and strongly made, and large numbers of them are now in use. It was patented on the 27th of January, 1863, by Geo. Weedon, of this city. For further information address him at 383 Sixth avenue, New York.

## The Corn-sugar Patent.

In the list of patents issued during the week ending Dec. 20, 1864, is one to F. W. Goessling, of Buffalo, N. Y., the claim of which is in these words, "I claim a new and improved compound sugar made by a combination of cane sugar or cane sirup with corn sirup, substantially as set forth."

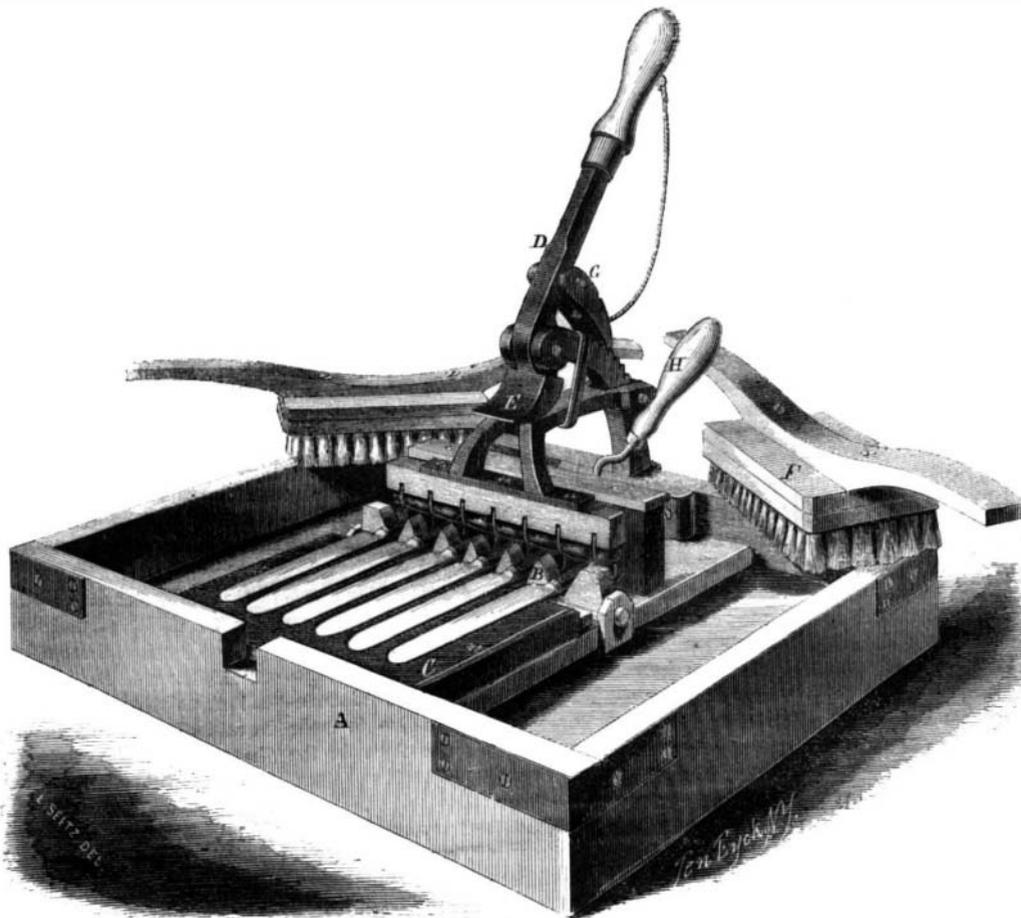
It has been claimed for Mr. Goessling that he had discovered the art of converting grape sugar into cane sugar. This would have been a great discovery. But if his invention is no more than the above claim—the sweetening of grape-sugar sirup with ordinary sugar—we are unable to perceive its great magnitude. Perhaps more important discoveries are yet to be made. We shall watch with interest for further developments in this new sugar enterprise, which, in importance, if half be realized that is claimed for it, is hardly equalled by the Petroleum interest.

## Long Bearings and Large Valves.

The engines for the new fast frigates building by Government are of unprecedented dimensions for machinery of their design. The cylinders are two in

number, horizontal, 100 inches diameter, and 4 feet stroke.

The bearings of these engines are unusually long, being in diameter 18 inches, and in length 4 feet. The engines have slide valves of immense weight and area; deprived of the steam pressure alone the mere stopping and starting of these valves thirty or forty



WEEDON'S KNIFE CLEANER.

times in a minute is an enormous waste of power. The valves have steel rollers under their bottom edges, and under the steam face, to relieve the excessive friction. A pair of car wheels ten or twelve feet in diameter would materially aid in reducing the friction but rollers under the faces would seem difficult to regulate so as to be beneficial.

## Petroleum Stock Swindle.

Since our recent expose of the oil stock swindle the ardor for investment in that direction appears to have cooled off to a considerable extent. The people are beginning to realize that the windy prospectuses of Petroleum Companies are nothing more than cunningly contrived traps in which to catch the unthinking multitude. A journal published in this city, representing the petroleum interests gives a list of several Companies as being entirely worthless whose aggregate capital amounts to six million dollars.

The dupes who have fallen into these traps ought to have the schemers indicted by the Grand Jury for swindling.

The Erie (Pa.) Dispatch sharply denounces the bogus oil Companies and oil speculation in that section. It claims that correspondents writing to some New York papers furnished lying reports of oil discoveries, and modestly claim to be the only reliable exponent of the business interests of the oil country of north-western Pennsylvania.

## Cotton Cultivation in the West Indies.

Hunt's Merchant's Magazine says:—

"A company has recently been formed in this city styled 'The American and British West India Cotton Co.," which has leased for a term of years 2,000 acres of land, on Long Island, one of the group of Bahamas, situated in latitude 23° 10', longitude 75° 3'.

This island, it will be remembered, is 100 miles long, from 5 to 7 miles wide, and from 50 to 75 feet above the level of the sea, and no climate in the world is more healthy or better adapted for invalids. The average temperature is 80°, never rising above 85°, while the land is said to abound in springs of the best kind of water, which is obtained by digging from five to fifteen feet. Previous to the year 1835, it was settled by cotton-planters with their slaves, and thousands of bales of Sea Island cotton were annually exported to Europe. When slavery was abolished, the culture of cotton ceased, and almost the whole of the white population emigrated to other countries, leaving the land to the freed blacks, who employed their time in making salt.

During the past two years, several persons have had a portion of the land cleared, and have raised a small quantity of cotton, the quality of which is claimed to be

superior to any raised on the coasts of Georgia and South Carolina, selling here at higher prices than the best Sea Island cotton raised in this country. Estimates of the cost of raising place it at ten cents (gold) per pound, and an acre with good cultivation will yield four hundred pounds.

This company has been formed for the purpose of cultivating this land, and, to relieve themselves from the difficulty of procuring laborers, have sent a number of men from the United States, who will always be in their service. The company feel sanguine that, with careful management, the original cost will be below the above estimates; and should peace once more reign in our country, and everything be reduced to its former standard, the prospects of the company will be no less favorable, as the quality of cotton raised on the island always sold at sixty cents per pound.

ENGLISH BALANCE OF TRADE.—Blackwood's Magazine says that last year the exports from Great Britain amounted to 160 millions sterling, and the imports to 280 millions. Every nation must have what is called a balance of trade against it every year.

Hall's Journal of Health, a monthly periodical, containing useful information on various subjects, is published at No. 12 Union Square, New York, for \$1 50 per year.