CLEANLINESS

THRU THE AGES




1934
A CENTURY
OF PROGRESS
CHICAGO

CLEANLINESS

THRU

THE

AGES





IT IS THE PURPOSE of this booklet to give a brief glimpse of a great subject.

There may have been ages and places in prehistoric times where man didn't come into contact with dirt, or refuse, or pests, or germs, but ever since people began dwelling together, they have been subject to attacks by vast armies of unseen and unknown foes,—by billions of germs whose very existence was unsuspected.

When whole cities and armies were struck down by pestilence, the calamity was laid to the gods. These were propitiated by sacrifices and sometimes by lustrations, which helped to clean things up and to stop the pestilence.

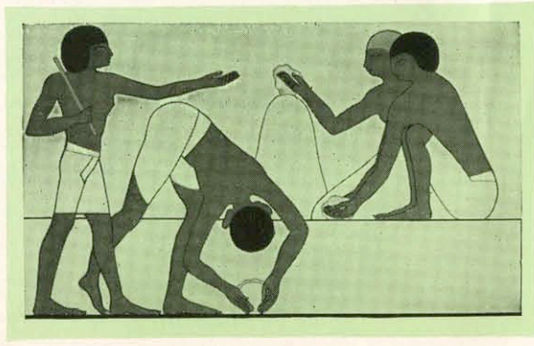
Slowly cleanliness began to come in as a factor in human survival. If a people were too squalid, they died off; if they were clean, it helped them to survive and pass down their habits to their descendants.

Of course this wasn't recognized. Far from it. For centuries women worked for cleanliness, without ever imagining the importance of the battle they were waging. And it is only in recent years that science has discovered the multitudes of our unseen enemies and let us know how vital cleanliness really is.

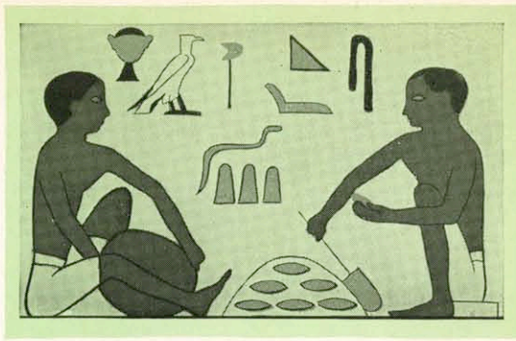
CLEANLINESS THRU THE AGES

It is a socially important fact that the nations which have led in the world's civilization have been particularly cleanly. In some cases their cleanliness has been made a part of their religion and been enforced by religious laws; in other cases, cleanliness has been considered a duty or been the fashion. But whatever its cause, their cleanliness has probably preserved the health of the nation and made it more robust and better able to endure the struggle for existence and growth.

When the curtain of civilization rose along the Nile in Egypt, the religious ritual there demanded cleanliness. The priests kept their heads shaved and bathed several times a day. The images of the gods, when the festivals sacred to them approached, were scoured and scrubbed and reanointed with oil. When the natal days of the kings and nobles drew near, their statues were scoured and oiled much as a small boy to-day is scrubbed and shined up for his birthday party.



Sandstoning and scouring stonework, Ancient Egypt



Baking cakes in the ashes, and cleaning the mixing jar, Ancient Egypt

In Egypt, where it rained only once or twice a year, and where the sands of the desert crept close to the Nile, it was enough for the ordinary dwelling to have an earthen floor with sand sprinkled over it, but stone pavements were later introduced in the temples and palaces, and cement floors have been discovered in the City of Akhnaton, the father-in-law of Tut Ankh Amon. These paved and cement floors were all scoured and scrubbed and kept clean by many servants, a process made easier by the fact that the Egyptians regularly went barefoot indoors.

The most accessible scouring material known to Egypt was the sand that seemed everywhere present. Sometimes it was used as sandstone and sometimes loose with water. For such great operations as the cleaning or scrubbing of the palace or temple floor, it was almost the only agent used. For such smaller duties as cleaning pots and kettles, where grease was present, ashes were employed. Shepherds in the marshes found the ashes of their fire best for cleaning the earthen vessel in which they cooked their food.

But ashes were not plentiful, for wood itself was scarce, and fire in that climate was ordinarily confined to cooking.

Soap was unknown, and though soapy plants were discovered and occasionally employed, they were not common.

Most of the pots and cooking utensils were still earthen, but various metals were in use and had to be kept clean. Copper had been used for ornaments since the dawn of civilization, but it was too valuable for the common household, or for kitchen ware except in palaces. Bronze had been invented, but was confined largely to ornaments. Iron had come in, but was used chiefly for weapons and edged tools. All of these metals were regularly scoured and polished, sand being employed for coarser work and ashes where scratching had to be avoided.

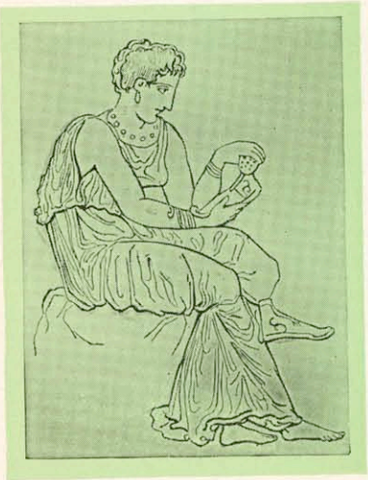
Among the Jews, cleanliness was commanded by the Mosaic laws. In making the "sin offering," for example, if the flesh of the offering were boiled in a brazen vessel, the law, as stated in Leviticus in the Bible, commanded the vessel to be scoured and rinsed with water. This suggests that possibly the danger from copper verdigris had already been discovered and was provided against by the ritual.

In a house, if green or reddish streaks appeared in the mortar, the adjacent stones, as commanded in Leviticus, were replaced by others set in new mortar, and the inside of the house was thoroughly scraped and scoured.

The proverb that cleanliness is next to godliness, or one very nearly like it, is found in the Jewish Talmud, or Biblical discussions. Thus, for many centuries the rabbis recognized the value of cleanliness for health and their laws were designed to enforce it.

For scouring, the Jews early employed ashes and later developed potash by burning plants strong in silica. Then they found natrum or soda in many places around the Dead Sea and discovered that it aided scrubbing by softening the water.

The Greeks had no such code of religious laws as the ancient Egyptians and Jews, laying out rules for cleanliness on religious grounds. But one of the great ideals of the Greeks was "a sound mind in a sound body," and, in order to maintain a sound body, they early developed athletic games, and personal and household cleanliness.



Cleaning a shoe in classic times

Homer gave several descriptions of bathing, and there were public baths at Athens in the time of Socrates.

The public buildings and private homes in Greece were kept clean by slaves, of which there were some 400,000 in Attica alone.

By that time, stone pavements were common for floors, copper common for kitchenware, bronze for statues and furniture, and steel for weapons.

For scouring, the Greeks employed not only sand and ashes but discovered pumice stone and fullers' earth. Pumice stone balls for scrubbing the hands were mentioned by Philo in 230 B. C. Earths from Silenus and Chios were early in wide use in the Greek households, where slaves scoured the stone floors, the pots of copper and iron, and the bronze tables and braziers.

Ashes or cinders called "konia" were said by Aristotle to be employed for cleaning oil jars and wine jars, as well as for general scouring. Soap was mentioned by Theocritus in 200 B. C., but it was known as a liquid utilized by the Germans and Gauls to lighten the hair.

At the same time that the Romans extended their empire around the Mediterranean, they did more as a government to introduce cleanliness than had ever before been attempted. A good proof of this is the aqueducts built at Rome and in many other parts of the empire. The first of these, the Aqua Appia, was constructed in 312 B. C., and in the first century after Christ there were nine aqueducts leading to Rome alone, which were among the greatest achievements of Roman engineering. These supplied water, not only for drinking, but for washing, cleaning, and scouring throughout the city.

Another evidence of how the Romans introduced cleanliness, is the public baths, many of which were built at Rome and in the other important cities of the empire. These were practically free, and sufficient in number and capacity almost to assure the personal cleanliness of the citizens.

One great result of this publicly encouraged cleanliness, was that the empire suffered but little from the terrible pestilences which are recorded to have taken place in the East. The Roman armies were usually free of disease, and if they caught one and brought it into the empire, it usually died out in a short time. Thus the cleanliness of the empire was one of the great sources of its long continued strength.

For scouring, the Romans made use of ashes or cinders, natrum, and nitre. Slaves cleaned the mosaic floors of the mansions with sand and cinders, scoured the pots and dishes with ashes from the charcoal fires, and cleaned the clothes at the public fullers with earths and washed them with nitre. Of the

cleaning of wine jars, Pliny, the Roman encyclopedist, wrote particularly, "They should be sprinkled with the ashes from tree shoots or else with the potter's earth; then they ought to be cleaned out and perfumed with myrrh,—an operation which should be applied frequently to the wine cellar as well."

In the neighborhood of Pompeii, the ashes of Mount Vesuvius were found to be highly effective for all sorts of scouring. Cinders were employed for cleaning the statues of the gods, according to Arnobius, a Christian, who ridiculed the whole idea of statues to the heathen deities.

In the 2nd Century A. D., Galen, the physician, occasionally utilized soap for cleaning, but stated that earths from Silenus and Chios were commonly employed for this purpose.

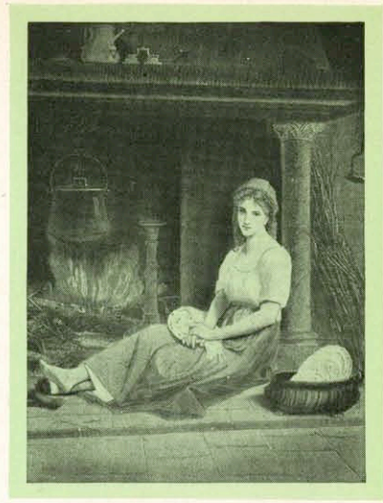
When the Roman Empire was overthrown by the barbarians, the aqueducts, baths, and public drains were destroyed, and cleanliness in the large cities became almost impossible. Moreover, various religious extremists, such as the ascetics, believed that one way to save the soul was the punishment of the body, and actually condemned any attention paid to cleanliness, either personal or in the dwelling.

The result was that the Mediterranean world became no longer immune to the plagues from the East.

Beginning in 542 A. D. a great scourge swept around the Mediterranean from Egypt and Constantinople, to Italy and Gaul. Other widespread pestilences of this sort are noted later in the 6th Century, and, in fact, all through the Dark Ages. That era has been called "a thousand years without a bath," and while this is exaggerated, the lack of cleanliness of the time had to be paid for in plague and pestilence. In 1348, for example, the Black Death entered Europe from the East



An Anglo-Norman dish washer, 14th century



Cinderella

and swept away a quarter of the inhabitants of Italy, Spain, France, Germany, and England.

Great epidemics continued to be frequent for the next few centuries, but, at the same time, with the rise of the new civilization, we begin to find evidences here and there of greater efforts at cleanliness. The earliest of these have to do with the scouring of kitchen utensils, as if the need for cleanliness there was appreciated first.

Chaucer, the first great English poet, for example, wrote in 1366, in the Romance of the Rose:

"Hir heer was as yelowe of hewe
As any basin scoured newe,"

which certainly implies that the custom of scouring kitchen utensils was again in vogue. This is also implied in a doggerel of the 16th Century, frugally warning the housewife against overdoing the matter:

"No scouring for pride!
Spare the clean kettle's side."

From that age also comes the story of Cinderella, who was forced by her stepmother to scour the kettles and dishes, but was enabled by her fairy godmother to marry the handsome prince. As her name implies, she worked in the kitchen by the cinders of the fireplace, and no doubt utilized the ashes from it for scouring.

The subject is also mentioned by Shakespeare, who in Henry VI notes the scouring of the Duke of York's armor, and in Two Gentlemen of Verona, about 1591, lists scouring as one of the attractions of a lady to be courted, "Item, she can wash and scoure—A special virtue."

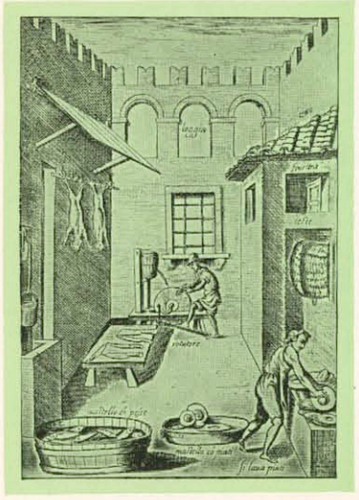
But in most countries attention to cleanliness was largely confined to the mansions, and the cities were still filled with

squalid districts. As a consequence, deadly pestilences kept recurring. There was a great plague in London, for example, in 1665, which cost 68,000 lives. What first put a stop to plagues there, was the great fire of 1666, which destroyed the wretchedest parts of the city and gave it an opportunity to rebuild anew and clean.

But the power of cleanliness against the pestilence had already been discovered by the Dutch housewives, and there is little doubt that they led the battle to stamp out the scourges that time after time had devastated all Europe. They had known of deadly epidemics in the besieged cities during the Thirty Years War, and had become convinced that cleanliness was one of the greatest defenses against them. In this belief, they scrubbed and scoured the house from top to bottom until it was meticulously clean. Their fame spread all over Europe, at the same time, we might add, that the triumphs of the Dutch navy carried its fame from the English Channel to the East Indies. It is a significant story that Admiral Tromp tied a broom to his masthead when he was sweeping their enemies' fleets from the seas.

The thoroughness with which the Dutch housewives cleaned their homes is indicated in an account by De Parival, the French traveller, "The wives and daughters scour and rub benches, chests, cupboards, dressers, tables, plate racks, even the stairs, until they shine like mirrors."

Often the housewife insisted upon doing her more precious belongings herself. The andirons and spits for meat, the shovels and tongs, the kettles and pans, the chandeliers and candlesticks, the tankards and pitchers, the tableware and kitchenware, were all kept bright and polished. "They scour everything," wrote De Parival,



Cleaning pans in the kitchen of the Pope, 1575



A Dutch girl scouring a kettle, by Gerard Dou, about 1635



Dutch servants scouring a skillet and pot, 1632

"even the iron chains and mounts until they shine like silver." As the lines ran,

"No trouble too great
From morning to night
To keep all the house
Spotless and bright!"

It was said that if the women's souls were as clean as their floors they would all go to heaven.

In the meantime, scouring, which had become one of the most prominent phases of housekeeping, had made its way into art, being depicted now and then in the work of the Dutch *genre* painters. In an engraving of 1632, after Adriaen van der Venne, two Dutch maids are scouring a skillet and pot before the fireplace in the kitchen, surrounded by various other kitchen furnishings. A painting by Gerard Dou about 1635 depicts a Dutch girl scouring a kettle in a window, while several other metal utensils lie waiting on the sill.

In those days the Dutch housewives used sand for the paved floors and for the white, unpainted wooden floors, scratches on which were not considered important. For the finer scouring required for the copper and bronze utensils and furniture, they employed ashes, and for their silver plate and pewter perhaps whiting.



Scouring a skillet with ashes, France, about 1750, by Chardin

The idea of the Dutch housewives of the necessity for absolute cleanliness gradually spread over Western Europe, and while not put into practice to the extent to which they insisted upon, it came to be considered an important method of combatting the plague. As a result, while the scourge appeared here and there in Europe throughout the 18th Century, it was confined more and more to the East.

It is rather striking that just about the time France became the leading nation on the continent, at the beginning of the 18th Century, we find evidences of a greater consideraton for cleanliness there.

The palaces and mansions, including their kitchen utensils and serving dishes, were assuredly kept clean by scrubbing and scouring, and the custom was taken up by the French peasants.

Moreover, scouring began to be depicted in French art. One of the best of the French *genre* painters, Jean Baptiste Chardin (1699-1779), painted several pictures of maids so at work. One in particular portrays a maid scouring a skillet over an ash barrel, where she is undoubtedly utilizing ashes and probably straw for the purpose. Similar scouring by means of ashes is illustrated in a couple of his other paintings, while still another one depicts a man cleaning a large wine jar by the side of a vat that probably contains water.

Chardin's interest was no doubt in the artistic sheen of copper and the picturesqueness of the maid, but scouring had become general enough to be made a subject of art.

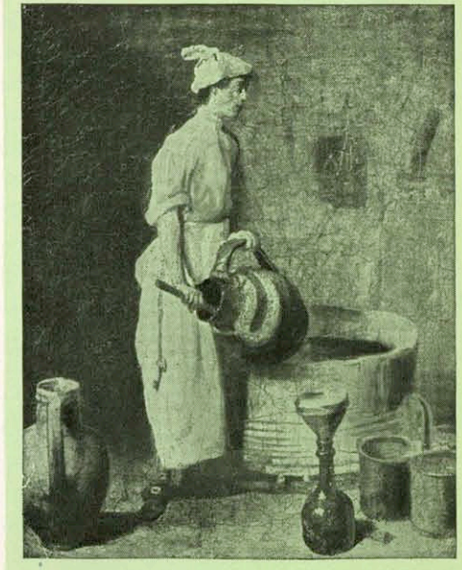
The scouring of paved floors with sand continued in Paris as in Holland, and occasionally the stone walls were scoured and cleaned, but the parquet floors introduced in Paris and kept highly polished would have been scratched by this rough treatment. Also the increased use in Paris of paint and gilt on woodwork and furniture, and of a higher polish on the tops of tables, reduced the use of scouring on these articles. So the most interesting records of scouring in France in that period have to do with the kitchen utensils, for which cleaning ashes were regularly utilized.

In England, in the first part of the 18th Century pewter came in and was much used for pitchers and urns and hollow tableware. It was too easily scratched to be cleaned with sand, and was usually scoured with pearl ashes or whiting.

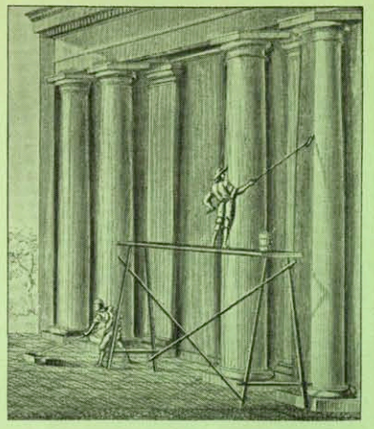
There are several notices of scouring in the writings of the period. The Female Tattler in 1709 notes how "the maids scour down the stairs," and the next year Steele's Tattler remarks that "the wench in the kitchen sings and scours from morning till night."

In 1712 John Arbuthnot objects to a woman "grudging a quarter of a pound of soap and sand to scour the rooms," and two years later wrote that a maid had scoured the rooms as clean as her andirons.

Before the Revolution the American colonies were beginning to favor rugs and carpets, which obviated much of the necessity for scouring the floors, but the use of metal utensils rather increased. We read of



Cleaning jars, by Chardin, France, about 1750



Cleaning a pavement and stone wall, France, 18th century

iron pots, andirons, grates, waffle irons, coffee mills, and sugar cutters; of brass kettles, braziers, tea kettles, coffee pots, piepans, and warming pans; of copper chafing dishes; of tin ovens that were set in front of the fireplace, and of tin pans for milk and other liquids. All of these articles seem to have been cleaned with ashes. And, as a matter of fact, ashes, besides uniting better with the grease and scratching less, were more available than sand. Then there were all sorts of pewter tankards and pitchers which might be scoured either with fine ashes or whiting, and silver plate, for which whiting was usually employed.

One of the most remarkable romances of the American colonies was that of Agnes Surriage, the scrub girl, and Sir Charles Henry Frankland, who was the Collector of the Port at Boston. When entering the Fountain House at Marblehead, Massachuestts, Sir Charles suddenly came upon Agnes scrubbing the floor. She was still in her teens, comely, and barefooted, so he tossed her a crown and told her to buy herself a pair of shoes. A little later he saw her again and was surprised to find that she was still barefooted. On being asked why she had not bought the shoes, she disclosed that she had bought them but was saving them for church.

This attracted his attention to her, and he eventually made her his ward and educated her. When recalled to England, he took her along but his parents would not receive her, and they went to Lisbon.

When he was coming from church, the great earthquake of 1755 demolished the city, killing 50,000 people, including all of his equipage except himself, but Agnes found him and saved his life by prying away a great rock which they said no two men could lift. That very day they were married, and when they

returned to England she was received by his parents with great gratitude. Later they visited Boston and were given a splendid ovation.

The expression "cleanliness is next to godliness" was used by George Whitefield, the British religious reformer, and by John Wesley, the founder of the Methodist Episcopal Church. The two were friends and long worked together, both, for example, being interested in the Colony of Georgia, so that it is unknown which coined the expression first. Moreover, as we have seen, something much like it goes back to the Jewish Talmud.

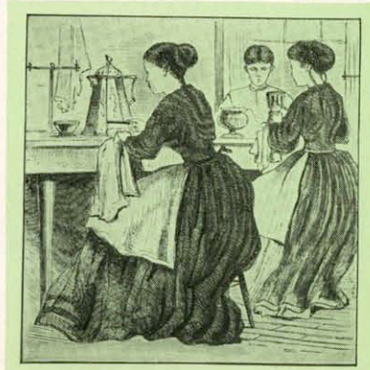
Perhaps the best idea of cleaning, and especially of scouring, in the household at the beginning of the last century, is to be obtained from the House Servants' Directory, written by Robert Roberts.

To clean steel knives, a so-called knife plank was constructed of soft pine about 6 feet long and the height of the hips. This plank was covered with brick dust, and the knives were scoured by rubbing them two at a time, one in each hand, over the dust.

To take off the black from steel forks, a keg was filled with dampened sand and chopped straw, and the forks, one in each hand, were plunged in, after which they were brushed and wiped.

The silver handles of knives and forks were cleaned with a mixture of gin and whiting. Silver plate was washed in soapsuds, and then rubbed with a powder made of chalk and hartshorn balls. Silver candlesticks were washed in soap and water and then rubbed with pearl ashes or whiting and chamois, or, as Roberts spelled it, "shammy."

Polished steel grates, after being washed with soap and water, were rubbed with crocus and gin, and then polished with rotten stone and leather. Rusty fire arms were rubbed with sweet oil, sprinkled with fresh slaked lime, and let stand for a day. Then



Women silver burnishers, 1867



Scouring a spider, England, 1800

they were rubbed with crocus and gin, and polished with rotten stone. The black was taken off steel grates with emery powder and soft soap, after which they were polished with rotten stone. The inner hearth of a grate was blackened with black lead or graphite mixed with the white of eggs and simmered in beer.

Brass or copper, when very green, was sometimes cleaned with a mixture of oxalic acid and antimony, which was a recipe brought from the new science of chemistry.

Glass lamps were cleaned with hot pearl ashes and water, decanters were cleaned on the inside with a mixture of pearl ashes, liquid soap, and bits of brown paper, which were shaken in them. Japan tea trays were rubbed off with flour or tea leaves, the spots being taken out with sweet oil. Britannia ware was polished with a mixture of whiting or pearl ashes, sweet oil, soft soap, and rum.

It was said that soft soap blackened oak floors, and that they should be cleaned with sand or pearl ashes. Deal boards were to be scoured with pearl ashes or fullers' earth. Stone floors were to be scrubbed with sand and water, or with so-called hearthstone.

All earthenware was cleaned with pearl ash and water, or soda and water, and practically the same materials were employed for scouring tin pans of all sorts.

One of the scourers popular a century ago, but now well nigh forgotten, was Dutch rushes. These had saw-like edges which had points as hard as flint, and, in fact, were composed of silica, as is flint.

The new science of chemistry had discovered why the verdigris on copper was poison, and the knowledge was gradually making iron rather than copper favored for kettles, pots, and skillets.

After the Napoleonic Wars, when Great Britain became the most important country in Europe, we begin to find all kinds of descriptions of the Englishman and his tub—of how he carried his tub with him to the British possessions in the tropics, dressed for dinner, and had a household of servants to keep his quarters clean. Probably he could not have done his work for the Empire without such cleanliness.

About this time the need for cleanliness was proved by a spectacular demonstration.

In 1854 in the Crimean War, in which England aided Turkey against Russia, all England was shocked by the terrible death rate among the wounded, which was running 42 percent.

In an attempt to better the conditions, the British Secretary of War invited Florence Nightingale, who had been foremost in the development of nursing in English hospitals, to go to the Crimea. She set forth with 38 nurses, arriving at Scutari November 4th, 1854. Ten thousand wounded were put under her charge, and by June she and her nurses had reduced the death rate from 42 percent to two percent. As she was not a physician, she necessarily did this not by new medicines but chiefly by sanitation and care.

The results of her work were published all over England, and were considered absolute proof of the necessity of cleanliness.

About this very time discoveries by Pasteur in regard to germs and their influence on living matter gave a new explanation of why cleanliness is necessary, and began to put the whole subject on a more scientific basis.

When the United States was becoming of first importance, it will be noticed that at that very time we were revolutionizing the bathroom, inventing all kinds of cleaning utensils, and making cleansers themselves the product of scientific manufacture.





THE SECRET OF ITS EFFICIENCY

Old Dutch Cleanser is unique in quality and character. Being made with pure Seismotite its particles are flaky and flat-shaped and clean with a smooth scratchless sweep.

SCIENCE DISCOVERS THE IDEAL CLEANSER

When science took up the problem of producing an ideal cleanser, it found it necessary, to begin with, to make something of a critical examination, with the aid of its microscope and its recent knowledge of chemistry, of the natural scourers that had been used in the past.

It found that women had used scourers that were ready at hand and had been discovered by practical experiment to be of some aid, without attempting to understand what made them work and what were their defects.

Most of these scourers, the scientists found to fall into the class of abrasives, or grinders, which ground off the dirt much as a grindstone might grind off a metal surface. Sand, for example, which had been used for scouring since the dawn of history, consisted of grains mostly of flint, each of which had many sharp points that simply scratched off the dirt. The difficulty was that in doing this it scratched the surface of the material and actually left more and more roughness for the dirt to cling to. Moreover, while at first such scratches may not have seemed very serious on stone floors, for instance, yet in time deteriorating effects were noted that were very objectionable. And of course scratches became tragic where the object scoured was of value.

The same facts were true in regard to brick dust and scouring bricks, which were formerly favored cleaners in the kitchen. Chalk or whiting, while not so rough, scarcely scoured at all without great labor, and was more suitable to be merely a polisher.

None of these abrasives, such as sand or brick dust, had any chemical action to assist the scouring. On the other hand, ashes, which were formerly used for

scouring in the kitchen, had a very strong affinity for grease and oil, which helped in the scouring of kettles and pots. One difficulty with them was that if used on paint they would actually take the linseed oil out of the paint and make it dry and crack off. Another trouble was that the ashes were regularly mixed with colored matter, like charcoal or other grime, and were actually too dirty to scour light colored surfaces. Also wood had largely gone out of use as a fuel, which made wood ashes scarce, and coal ashes were made rough by cinders.

The scientists also found that scouring and cleaning involved new requirements in the modern world. In early times the work was done largely by slaves, and the amount of toil was of little importance. Even where the housewives did their own work, time in the early days was not pressing. The question as to whether the scouring material was hard on the user's hands was also of little consequence, certainly as regards the hands of the slave, and, to a not much greater extent, of the early housewife.

But in modern times, the scientists perceived, there are no slaves, labor is expensive, there are many things to do, time is precious, and the hands of the housekeeper must be protected. So the scientists realized that the ideal cleaner must polish and clean thoroughly and perfectly, in the quickest possible time, with the least possible toil, without any scratching or injury to the material, and without any harm to the hands of the user. Moreover, it had to be economical and capable of being produced in large quantities to meet a widely felt need.

The discovery that formed the basis of the ideal cleaner was that of the use of pure seismotite for this purpose.

Seismotite is a product of Nature formed many ages ago. Geology has taught us that in prehistoric times, when volcanic action took place in the Rocky Mountain region, hot, boiling masses of a whitish mineral were erupted and thrown forth in a foam-like state, which, on cooling, settled to the earth in a fine white powder. Deposits of this material were blown and drifted into low depressions where it is generally found in ledges more or less mixed with sand or clay. The powder also fell on the surface of the lakes where it settled to the bottom. These now dried-up lake beds are deep deposits of the volcanic mineral in pure form, and it is from such deposits that Old Dutch Cleanser is made. This is why there is nothing else like "Old Dutch" either in composition or operation.

Off hand and because the particles require a microscope to show their form and construction, a housewife might not notice much difference in the appearance of two totally different powders. But between Old Dutch and other cleansers there is a vast fundamental scientific difference. Fineness of the powder is no proof of the absence of scratchy grit, because no matter how fine you grind grit the particles are still hard although smaller in size and still scratch. A few simple fundamental tests will make all this evident. There is a coin test, for example, which you can perform for yourself.



Famous Old Dutch Coin Test

Sprinkle a little of another cleaner, which we shall call Cleaner X, on a plate, then take a coin and rub over it. There is a grating sound, and you feel a rough, scratching friction. Now sprinkle a little of Old Dutch on a plate and rub a coin over it. You will not hear nor feel the grating and grinding of scratchy grit. This proves at once that Cleaner X scratches, and that Old Dutch Cleanser does not.

Then, also, we have developed another practical test known as the "Glass slide test." Place a little Old Dutch between two pieces of glass and rub them together. You won't feel or hear the scratching of hard gritty particles, because there are none in Old Dutch. Then examine the glass, and you will find it unscratched. Submit cleaner "X" to this test and note the difference.

Now of course there must be a physical reason for this, and, in fact, scientists, by the use of the microscope, have discovered it. They have found, for example, that Cleaner X contains hard grains, each having many sharp points, but that Old Dutch is composed of Seismotite, whose flaky particles are thin and flat, and have feathery edges.

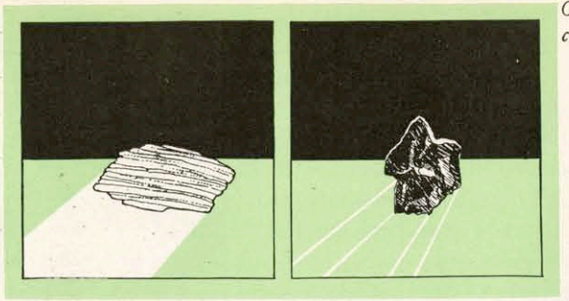


Glass Slide Test

In fact, this is a fundamental difference between Old Dutch and all the abrasive scourers, such as common gritty cleansers, sand, sandstone, brick dust, pumice, and the like. Their particles are sharp pointed, rough and jagged whereas those of Old Dutch are flaky and flat-shaped.

One important result of this is that the same amount of Old Dutch covers a great deal more surface, does a great deal more work, and cleans many more square yards of surface than other cleaners.

Old Dutch cleans like this

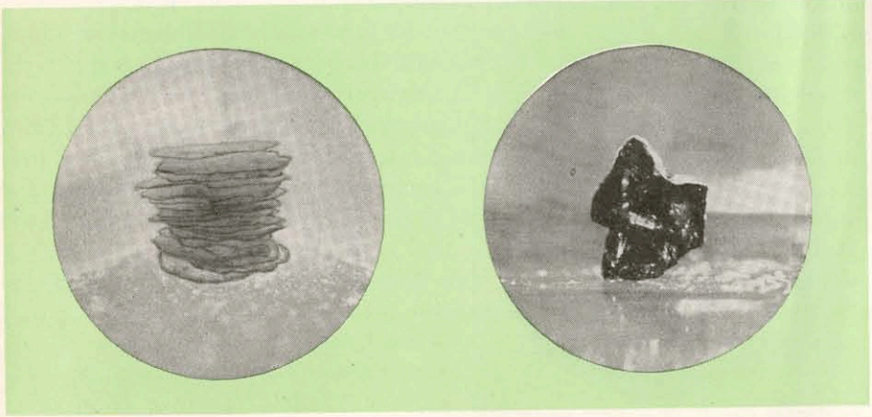


Ordinary gritty cleansers scratch like this

Old Dutch Cleanser also does its work in an entirely different and thoroughly scientific way. It cleans like small squeegees lifting and removing the dirt from the surface, as it were, by "adsorption" rather than by abrasion. The gritty cleaners scratch off the dirt, as well as some of the surface along with it, and leave more scratches to catch more dirt, germs, and impurities. But the particles of Old Dutch Cleanser lie flat on the surface, thus having a much greater contact with it and forming, as it were, a "cleaning blanket." They attract the surface grease in which the dirt is mixed, and slide off the grease and dirt, instead of merely scratching it off here and there.

Old Dutch thus cleans more efficiently, saves the fine finish of the surface by not digging into it.

Old Dutch is not only the ideal Cleanser, but the most economical because you get more square yards of cleaning per penny of cost. The microscopic photographs reproduced below illustrate how you get many more flat-shaped particles in place of one chunky, gritty particle.



Eighteen Old Dutch particles

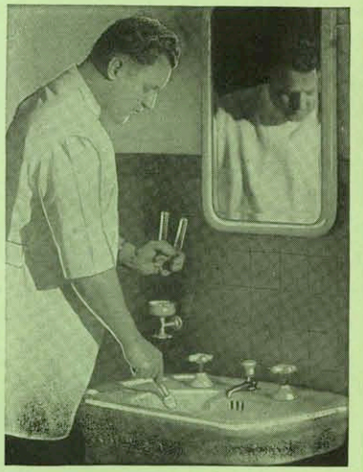
One gritty particle



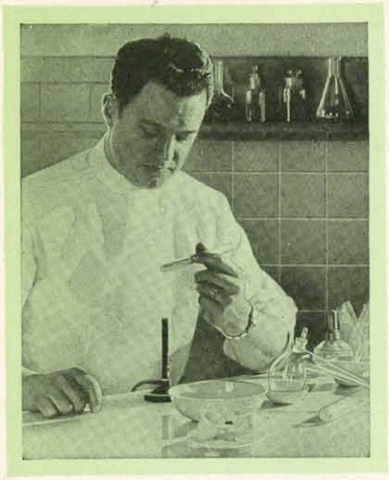
In this illustration the flat-shaped particles reproduced in the preceding picture have been spread out. This has been done to demonstrate that the same amount of Old Dutch covers a great deal more surface, does a great deal more work, and cleans many more square yards of surface than gritty particles. This has been proved by practical experiments which have shown that an ounce of Old Dutch cleaned more square yards of surface.

Through years of increasing knowledge, health has become recognized as vital to the well-being of mankind. Experience has taught that the prevention of disease is far easier and more effective than any attempt to cure. As a result, health standards have become more precise.

The primary requisite of health is cleanliness. Hygienic cleanliness is one of the most important factors in the control of dangerous bacteria. An object may appear clean, but unless it is entirely free of all impurities, it is not healthfully clean, as Healthful Cleanliness requires the removal of dangerous invisible impurities as well as visible dirt.



Modern housekeeping demands Healthful Cleanliness; it has become a watchword of the modern home. Old Dutch Cleanser has brought to the housewife this assurance, and through years of unfailing service has become universally recognized as the greatest achievement in modern cleaning effi-



ciency. Microscopic examination proves that surfaces cleaned with Old Dutch are wholesome, hygienically clean. The tiny, flat-shaped particles of Old Dutch take up all visible dirt and by a process similar to "adsorption" remove dangerous invisible impurities which are often a menace to health.

Our testing laboratories have made thorough and extensive tests of Old Dutch Cleanser. Cultures taken from washbowls, utensils and other household equipment cleaned with Old Dutch and examined under the microscope show these surfaces to be free of scratches and that impurities have been removed. Where surfaces are cleaned with gritty cleaners, scratches are made, which not only mar the beauty of the surface, but form catch-alls for dangerous invisible impurities, thereby making future cleaning increasingly difficult.

Rigid tests have definitely established the safety of Old Dutch Cleanser for all household cleaning where water may be used. Safe, not only because Old Dutch doesn't scratch, but because any surface on which Old Dutch is used is left in a true condition of Healthful Cleanliness.

The principle upon which Old Dutch Cleanser works likewise saves the hands of the user, just as it saves the finish of the material. The scratchy abrasive cleaners that scratch the dirt off the material, necessarily roughen the skin of the hands at the same time, but Old Dutch Cleanser, which slides off the dirt, is kind to the hands and does not harm the skin.

This is corroborated by millions of housewives, who regularly employ Old Dutch Cleanser and find it not only more efficient, easier, and quicker, but safer for the material and for the hands. That Old Dutch Cleanser is safer for the material is affirmed by thousands of manufacturers, who naturally want their products to give the most satisfaction and recommend Old Dutch Cleanser for cleaning and polishing, because they find it safe and best preserves their goods.

A few of the thousands of endorsements of Old Dutch Cleanser are included here.

GOOD PRODUCTS DESERVE GOOD TREATMENT

That's why these leading manufacturers have written us their endorsement of Old Dutch Cleanser

Advance Stove Works.....*Stoves*
All-American Mohawk Corp.....*Refrigerator*
American Stove Company..*Stoves Magic Chef*
Apex Electrical Mfg. Co., The
.....*Washing Machine, Ironers & Ref.*
Associated Tile Manufacturers.....*Tiling*
Barre Supply Co.....*Barber & Beauty Supplies*
Bellaire Stove Co., The .....*Stoves*
Blackstone Mfg. Co., The. *Washing Machines*
Bohn Refrigerator Co.....*Refrigerator*
Comstock-Castle Stove Co.....*Stoves*
Copeland Products, Inc.....*Refrigerator*
Cribben and Sexton Company *Universal Ranges*
Crosley Radio Corp., The ... *Crosley Shelvador*
Cyclops Iron Works.....*Refrigerator*
Detroit Vapor Stove Co., The .....*Stoves*
Duluth Refrigerator Corp.....*Coolerator*
Electrolux Refrigerator Sales Inc..*Refrigerator*
Erie Enameling Company, The
.....*Porcelain Enameling*
Estate Stove Company, The. *Heatrola & Ranges*
Florence Stove Company.....*Stoves*
Frantz Refrigeration Co.....*Water Coolers*
Fuller-Warren Co.....*Stoves & Ranges*
General Electric Co.....*Refrigerator*
General Steel Wares, Ltd.....*Ranges*
Geuder, Paeschke & Frey Co. *Enameled Wares*
Glenwood Range Company.....*Ranges*
Grinnell Washing Machine Corp.
.....*Washing Machines*
Hammer-Bray Co. Ltd.....*Stoves*
Horton Manufacturing Co. *Washing Machines*
Indianapolis Stove Co.....*Stoves*
International Nickel Company, Inc., The
.....*Monel Metal*
Jewett & Company.....*Stoves & Ranges*
Kalamazoo Stove Co.....*Stoves*
Kelvinator Sales Corp.....*Refrigerator*
Lang Mfg. Co., F. S.....*Ranges & Stoves*
Laundryette Corp., The ...*Washing Machines*
Leonard Refrigerator Co.....*Refrigerator*
Lindemann & Hoverson Co., A. J. .....*Stoves*
Louisville Enameled Products Co., The
.....*Porcelain Enameling*
Meadows Mfg. Co., The...*Washing Machines*
Montag Circulator Heaters....*Stoves—Heaters*
Moore Brothers Company. *Heating Appliances*
Mosaic Tile Co., The .... *Floor and Wall Tile*
National Association of Stove Manufacturers
.....*Stoves*
Nome Refrigerator Co.....*Refrigerator*
Nonnenman Tile Craft Ltd.
.....*Tile—Marble—Terrazzo*
Norge Corporation.....*Refrigerator*
O'Keefe & Merritt Co...*Stoves & Refrigerators*
Ottenheimer Bros., Inc. *Commercial Refrigerator*
Pittston Stove Company.....*Stoves*
Polar Ware Company.....*Enameled Wares*
Portland Stove Foundry Co.....*Ranges*
Quincy Stove Mfg. Co., The ..... *Ranges*
Renfrew Refrigerator Co., Ltd....*Refrigerator*
Rhinelander Refrigerator Co.....*Refrigerator*
Roberts & Mander Stove Co.....*Stoves*
Round Oak Furnace Company *Stoves & Ranges*
Servel Sales, Inc.....*Refrigerator*
Siegler Enamel Range Co.....*Stoves*
Sparks-Withington Co., The.....*Refrigerator*
Standard Refrigerator Co..*Com. Refrigerators*
Sunray Stove Company, The.....*Stoves*
Swinton & Company.....*Stoves*
Tappan Stove Co.....*Stoves*
United States Stove Corp.....*Stoves*
Universal Cooler Corp.....*Universal Coolers*
Vitreous Enameling & Stamping Co., Inc.
.....*Porcelain Enameling*
Vollrath Co., The..... *Enameled Wares*
Westinghouse Electric & Mfg. Co. *Refrigerator*
Williams Oil-O-Matic Heating Corp.
.....*Refrigerator*
Zerozone Corp.....*Refrigerator*

DISTINGUISHED ENDORSEMENTS

Distinguished service, superior quality, unequalled cleaning efficiency and economy have not only won for Old Dutch Cleanser the unanimous acceptance of experienced homemakers, but has earned for it the official stamp of approval of America's most highly recognized testing institutes.

Tested and Approved by
SERIAL NO. 37
The Chatelaine Institute
MAINTAINED BY
The Chatelaine Magazine

HOME SERVICE BUREAU
HOME TESTED & APPROVED
No. 14
CANADIAN HOME JOURNAL

Tested and Approved
SERIAL NO. 3004
by
Good Housekeeping © Institute
Conducted by
GOOD HOUSEKEEPING MAGAZINE

APPROVED BY THS
THE HOUSEHOLD SEARCHLIGHT

Delineator Home Institute
Endorses
OLD DUTCH CLEANSER



GET BETTER ACQUAINTED

When you know Old Dutch Cleanser as do the thousands of homemakers who recently have written us, your comments too, will be: "Old Dutch is the only cleanser I need in my home." On the following pages we have reproduced excerpts from a few of their letters.

Get really acquainted with Old Dutch. You will find you can confidently entrust your cleaning to it, and rid yourself of unnecessary powders, bricks, pastes, inferior cleansers and needless effort and extra work.

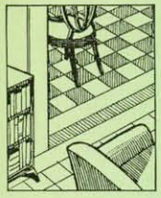
You can use Old Dutch on any surface where water may be used for cleaning. Its application is unlimited, and may be used on

PORCELAIN ENAMEL
SINKS
POTS AND PANS
TINWARE
WOODENWARE
CUTLERY
EARTHENWARE
CHINA
GLASSWARE
ENAMELED WARE
ALUMINUM
STOVES
OIL AND RUST FROM MACHINERY
FALSE TEETH
REFRIGERATORS
LINOLEUM
OIL CLOTH
KITCHEN FURNITURE
MIRRORS
WINDOWS
NICKELWARE
BRASS
IRON
COPPER
BATH TUBS
WASH STANDS
TILE
MARBLE
PLATED FIXTURES
PAINTED WALLS
WOODWORK
FLOORS
STONE STEPS
WINDOW SILLS
WASHING MACHINES
CREAM SEPARATORS
MILK CANS
STATUARY
GLAZED BRICK
RUBBER FLOORS
SURGICAL INSTRUMENTS AND EQUIPMENT

In fact, Old Dutch is used around the world for a world of uses.



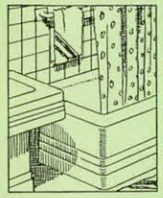
PAINTED WALLS—I wouldn't use anything else on painted walls, woodwork, floors, bathroom, kitchen cleaning or removing spots from mirrors or windows. Before repainting kitchen furniture I scour it thoroughly with Old Dutch; then when the painting is done, the result is a beautifully smooth finished job. MRS. E. P. BARNETT, Maplewood, Mo.



TILE FLOORS—Old Dutch Cleanser has preserved the surfaces of my aluminum and silverware; keeps my ice-box not only spotlessly white, but sanitary; it is entirely responsible for that glossy cleanliness of bathroom fixtures and tiling. It cleans quickly, safely and thoroughly.
MRS. GEO. C. GIVENS, Brooklyn, N. Y.



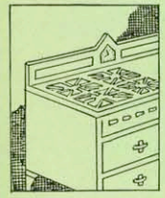
KITCHEN UTENSILS—Old Dutch Cleanser is the only cleanser I need in my home because, after fair comparison I have found it to be most efficient and thoroughly economical in its various uses. It is invaluable in the kitchen, leaving utensils and sink shining and spotless. Onion taste and concentrated seasoning odors are quickly removed from knife or pan by an application of "Old Dutch Cleanser."
MRS. M. S. WHITESIDE, Cullman, Ala.



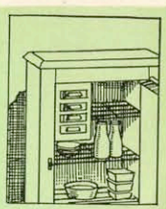
BATH ROOM—My husband being a plumber insists I use the best cleanser on all bath-room fixtures and kitchen sink. After 15 years use of Old Dutch I have received many compliments on the whiteness and luster of my fixtures which naturally makes one proud—also is a great personal satisfaction. MRS. DELL MOON, Lansing, Mich.



FALSE TEETH—What would I do without Old Dutch Cleanser? I always use it because I know it is reliable. It is indispensable for obstinate pots and pans, brightening the bathroom, freshening the icebox, scrubbing floors, walls, woodwork—even furniture. Why I even clean my false teeth with it. MRS. HERMAN JANZ, Peru, Ill.



COOKING STOVES—I have been using "Old Dutch" for twelve years, and find that it answers every common need and some uncommon ones for a cleanser in our home. It cleans the brown from the white porcelain on my range. I also use it to clean marks from varnished floors made by chairs and beds. MRS. ALICE A. REED, Detroit, Mich.



REFRIGERATORS—New uses are continually suggesting themselves for Old Dutch Cleanser. It has long since emerged from the kitchen and bathroom and is making its appearance in every nook and corner of the home and garage. Old Dutch Cleanser blots up dirt, grease and tarnish in a wink—cleans and polishes like a flash and preserves the brilliance of lovely things—is odorless and removes odors—cannot be excelled for cleaning ranges, refrigerators, bread and cake boxes, furniture, automobile windshields and metal trimmings. MRS. W. F. BECKER, Baltimore, Maryland.



CHINAWARE—Old Dutch Cleanser is the only cleanser that is kept in our home. Here are some of the uses for which I find it excellent: Removing coffee or tea stains from high grade china, cleaning silver and jewelry, cleaning removable bridges and other dental work, cleaning comb and brush.
MRS. EDWARD F. HIGGINBOTHAM, Birmingham, Ala.



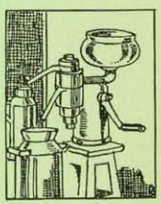
BABY'S TOYS—Since using Dutch Cleanser, I wonder why I wasted time on others. It is surprising that such a low price can buy such an efficient cleanser. It is so pure that I use it to clean my babies' toys to keep them germ-free and bright. MRS. ROY TAYLOR, Franklinton, La.



WHITE LINEN SHOES—For several years I have used "Dutch Cleanser" as a scouring powder for my sink and kettles, but one day I tried an experiment:—using "Old Dutch" to clean my white linen shoes, with such excellent success, and no damage to the fabric; another reason why "Dutch Cleanser" is the most *economical* and *complete* household cleanser, and the *only* cleanser needed in *any home*.
MRS. FLORENCE B. ROBISON, Foxboro, Mass.



KITCHEN SINK—Long ago I learned the folly of taking a substitute for Dutch Cleanser, or of buying another brand of cleanser only because it was on sale. Ever since I have been using Dutch Cleanser exclusively for all cleaning purposes, the kitchen sink retains its whiteness instead of gradually turning brown. MRS. E. SCHUMAN, Milwaukee, Wis.



SEPARATORS AND MILK PAILS—I, too, use Old Dutch Cleanser! I have learned the economy of quality. I live on a farm. Milk or cream containers must be sweet and clean, so Old Dutch Cleanser takes care of this job. Pails, strainers, separators, bottles, churns, all respond to this cleanser. It's quick, safe, and easy to use.
MRS. MARJORIE NORTON, Dover, N. H.

COPYRIGHT 1933
OLD DUTCH CLEANSER
CHICAGO

PRINTED IN U.S.A.



