

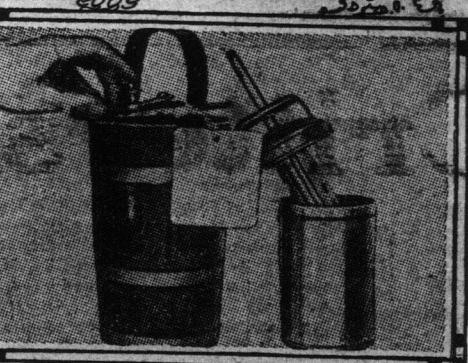
## USEFUL THINGS INVENTED BY WOMEN



A machine that makes  
Paper Bags.



This chair brushes flies from  
Bald Heads.



The Ice Cream Freezer was invented  
by a woman.

MARY KIBB was granted the first patent that was issued to a woman in this country. She devised a method of weaving straw with silk thread.

For some time after this feminine ingenuity appeared to content itself with improving existing or devising new articles of wearing apparel, kitchen utensils or other things intended for use or ornament about the home.

As her sphere of personal activity widened, woman began extending the scope of her inventive efforts. Indeed, it has often been asserted that a number of the most valuable inventions upon which men have taken out patents and realized fame and fortune were developed from ideas originating in the brains of feminine relatives.

Ell Whitney's cotton gin was responsible for the immense strides taken by King Cotton, yet it has been asserted that this machine was but the practical application of an idea that found birth in the brain of the widow of General Nathaniel Greaves, of Revolutionary fame.

When a Philadelphia woman patented an improvement in herives, and another had come forward with a device for heating railroad cars, feminine ingenuity was no longer content to exercise itself within the confines of the domestic circle.

A new idea in plows was duly protected by a Georgia woman, while one in Ohio brought to the attention of the world her claims in an improved car coupler.

Only a short time ago the woman whose inventive brain gave the ice cream freezer to delighted humanity died at an advanced age in Philadelphia. This was Mrs. Nancy M. Johnson, and her device was patented in 1843.

Since then many different kinds of ice cream freezers have been placed upon the market, but an examination of Mrs. Johnson's original model, which still reposes in its case at the Patent Office, shows that in principle modern devices do not differ from it materially.

The simple but effective manner in which eggs are packed for market in pasteboard trays had its inception in the exasperation of a farmer's daughter, who was greatly annoyed by the breaking of eggs in transit.

Her first device, rather crudely made by hand, was not as neat or compact as the trays that are now turned out by the thousand through the agency of machinery, but it answered the purpose.

There are many varieties of egg crates now represented by patents, but all are based upon the principle that occurred to the perplexed farm-

er's daughter as a solution of her troubles.

The paper bag with a satchel bottom, which has proved so convenient to grocers and shoppers, and the device for making it, are the invention of Miss M. E. Knight. The wonderful little machine turns out these bags with great rapidity and accuracy of construction.

With the possible exception of Mother Eve, woman has always been solicitous of the welfare and comfort of men, and women inventors have devoted a great deal of thought to devices intended to make more pleasant the existence of their fathers, husbands and brothers.

Mary A. Woodward, of Palmyra, N. J., placed herself in the list of candidates for canonization by bald-headed men when she invented a rocking chair for their especial benefit.

The chair part of the device is like that of any other similar piece of furniture. From the back two curved rods extend upward to a crosspiece a foot or more above the head of the occupant and dependant from this is a cloth strip with tassels at the bottom.

When the weary man with a "staring pink" expanse upon his cranium sinks into the chair and rocks gently, the cloth flops back and forth, brushing fly pests from his crown while the tassels protect the sides of his head and his ears from the insect annoyance. At the same time the device fans the air over the bald spot into soothing wave currents.

A mustache spoon, which enables a man with a heavily decorated upper lip to sip soup in comfort without besmearing his shirt front, is also the invention of a woman.

So are several varieties of mustache guards, a patent cuspidor and an umbrella that becomes a cane in fair weather.

WOMEN HAVE PATENTED CIGARETTE MACHINES, but it would seem that the feminine fancy went too far when it undertook to evolve an "improvement" in cigars by soaking them in an extract of pine needles "in order to take away that nasty taste." Yet such an "improvement," so called, may be found in the Patent Office.

Another woman, believing that anything that would "make smoke" should prove acceptable to lovers of the weed, proposed to manufacture cigars from eucalyptus leaves, so that a pleasant taste might be left in the mouth.

Not a few designs—some of them cleverly contrived—of fire escapes are credited to inventive women. Others have planned motors for sewing machines and other domestic aids; a

thermometer fire alarm, which gives its warning when the temperature reaches a certain figure, a balcony that may be carried from one house to another and adjusted, a thread cutter that is fastened to the thumb, a furnace that generates heat by means of chemicals instead of ordinary fuel, and a great many similar contrivances.

Some of the inconveniences and annoyances of travel have caused women to cast about for ideas of improvement. Augusta M. Rodgers, of Brooklyn, devised a locomotive attachment to consume cinders. By this, smoke and cinders are confined in that stack, the top of which is covered by a cap.

The engineer can lift the cap at any time by means of a rope connection, running back to the cap, sparks and cinders drop back into the fire and are carried along to the rear of the engine, where they are dumped upon the track.

A folding carpet, intended to aid invalids, decrepit or aged persons in climbing on or off the platform, is the result of a kind-hearted woman's thought.

Very numerous are the patents that have been issued to women upon novelties in furniture. One piece which appears to be a school desk, also contains an organ. With simple manipulation, an innocent-looking sofa is converted into a bathtub.

A lunch basket can be quickly changed into a little table upon which the meal may be spread; a trunk becomes, upon demand, either a bureau or a writing desk; another trunk may be opened and elongated into a bed. The woman who evolved this masterpiece probably did so after an unavailing search for quarters at a crowded summer resort.

One combination presents for service a bathtub or a traveling bag, as desired, and a simple dressing table, when drawn away from the wall, offers a complete bathroom equipment, tub and washstand.

Among the patents which women have secured to protect their inventions are a great many oddities, but there are also a great many ideas of practical usefulness. Feminine ingenuity frequently scores a remarkable success in fields that would seem remote from the consideration of the sex.

In the time of Queen Elizabeth a Parliamentary law enacted that a speech on one side should always be followed by a speech on the other.

The ovator is not much larger than the head of a pin when a fortnight old. At the end of four years growth it is fit for the market. Oysters live from twelve to fifteen years.

## The Last Bachelor Vanderbilt, Who Will Capture Him? Two Beauties Already Reported Engaged to Harold, Still in School



Harold Vanderbilt, the last Bachelor  
in that family.



Miss Violet Cruger, once reported engaged  
to Harold Vanderbilt.



Miss Eleanor  
Sears, whose  
engagement to Harold  
Vanderbilt was recently  
rumored.

HAS Cupid captured the only Vanderbilt who has not yet been married? For several years the little god has been industriously pursuing his reputed quarry.

Rumor has it that the heart and fortunes of young Harold S. Vanderbilt, probably the greatest "catch" of the day, have been placed at the feet of beautiful Miss Eleanor Sears, of Boston. The report has not been denied, and has stirred, like a summer whirlwind, the fashionable circles of New York and Newport.

The Vanderbilt family has brought to the matrimonial mart the richest prizes of this or any other social set, yet each has developed its own tender heart romance and wedded the woman of his un-influenced choice. One by one they have been removed from the list of eligible wealthy bachelors until only young Harold remains.

If he, too, as is asserted, is soon to join the ranks of the blissfully mated, there will be many a pang of disappointed ambition.

YOUNGEST SON OF WILLIAM K. Vanderbilt, this pleasant-featured and amiable young man will inherit a large share of his father's colossal fortune, and, doubtless, will be the beneficiary to the extent of several millions, more through the testamentary affection of his mother, now Mrs. O. E. P. Belmont.

His brother, William K. Vanderbilt, Jr., and his sister, the Duchess of Marlborough, will, of course, share in the extensive patrimony, although it is generally believed that a large part of the sister's portion has already been settled upon her in order that the impoverished Marlborough estates may be maintained in suitable magnificence.

The four other Vanderbilt boys of Harold's generation all married before their twenty-fifth birthday, and there is little surprise that he is reported to be about to follow their example.

His brother, William K. Jr., chose for a bride Miss Virginia Fair, sister of Mrs. Herman Oelrichs and part heir to the Fair millions. Of his three cousins, sons of Cornelius Van-

derbilt, Cornelius, the eldest, married Miss Grace Wilson; Alfred G. Vanderbilt wedded Miss Elsie French and Reginald C. Vanderbilt took for his wife Miss Kathleen Nelson.

Miss Eleanor Sears, pointed out by rumor—which made no mistake in predicting the matrimonial selections of the other Vanderbilts—as the future Mrs. Harold Sterling Vanderbilt is winsome enough through nature's gifts to win the heart of a millionaire.

But she has wealth of her own—at least, her parents are well supplied with the world's goods—and, in addition, her family stands at the very tip of the pinnacle of Boston's exclusive set.

She is regarded as one of the most eminently fitted girls in the country, from the viewpoint of the social register, for a Vanderbilt bride.

Although still young—only 23—Harold Vanderbilt has given the impression to this time that he was in no haste to select a wife—the matrimonial dragnet has been set for him since the days when he was preparing for college.

Three years ago it was believed that his tender affections had been ensnared by charming Violet Cruger, of New York, whose mother was a house friend of Mrs. Vanderbilt—no Mrs. Belmont—when they were reigning belles together in Mobile.

When this report took its winged flight through deeply interested social circles Harold Vanderbilt, now a student at Southboro, Mass., and his fellow-students and school friends was a brother of Miss Cruger.

It was remarked that whenever young Vanderbilt returned to New York he was a frequent visitor to the home of his friend—and, incidentally, the home of his friend's sister.

One winter, when the Crugers joined the fashionable colony at Hot Springs, Va., Harold left the preparatory school with a tutor and hurried to their home.

He was permitted to remain there and study, and, of course, he and Miss Cruger saw much of each other. He remained aloof from the "other buds" of the winter.

But the months and years passed, and there was no announcement of a coming Vanderbilt-Cruger wedding.

Leaving the preparatory school, the young man entered Harvard, devoting himself to his studies with commendable industry. He took a deep interest in sports, and became one of the assistant managers of the Crimson football squad.

DEMOCRATIC IN MANNER.

Democratic in manner and voted a thoroughly good fellow, he made hosts of warm friends at the university and was generally popular. But no one knew him to manifest more than a passing interest in even the most attractive of the opposite sex.

This summer, however, it is declared, has proved his heart's undoing. It was supposed that he would lose his heart some time, but he had been going about it in such care-free fashion that hopeful matrons with marriageable daughters did not despair.

For it was this summer that he met the beautiful Boston girl into whose keeping report has consigned his future.

A joyous, pellicking, healthy girl, Miss Sears loves the open-air life. Last season she shocked her friends at Newport by announcing her intention of swimming from Bailey's Beach to the tip of the island, a distance of four miles was covered in three and a half hours.

Miss Sears is careless about protecting herself from the sun. She has gathered a good deal of tan, and her lotic arms wear a decided copper hue and her cheeks are as brown as berries.

Fatherly it is well that the Vanderbilts men marry young—such a rich prize dangling too long before envious eyes might result in a sad state of affairs.

That all the Vanderbilts marriages of the men, at least, have resulted from love and have turned out happily is probably a greater source of surprise to the circles in which they move. But why should not a millionaire marry for love alone? Especially if he lacks only one thing in life—a poor relation.

Even younger than Harold was his brother, William K. Vanderbilt, Jr., when he led Miss Virginia Fair to the altar seven years ago. There was no objection to this match, and the bride added a few millions to the many in possession of her husband.

But before that event the loyalty of the Vanderbilts to the dictates of their hearts had been strikingly demonstrated by an older cousin of these young men, Cornelius Vanderbilt, who quietly accepted virtual disinheritance and gave up the headship of his house to wed the woman he loved.

Miss Grace Wilson was a handsome, accomplished and in every way an attractive girl, and there was no reason that the world could comprehend why she should not be a fitting

mate for the eldest heir of that branch of the Vanderbilt family. But Cornelius Vanderbilt, the elder, set his face firmly against his son's choice.

"You may marry her," he stated sternly to the young man just out of college, "but if you do so, you must forgo your place in the Vanderbilt line and your share of the family fortune. That is all."

Having already won the heart of the charming girl and the consent of her parents, young Cornelius did not hesitate a moment in deciding upon his course. Straightway he proceeded to the home of his fiancée and asked to see her father, Richard T. Wilson.

"Mr. Wilson," he began, without waste of words, "I have received your permission to marry your daughter. When you gave it to me I had expectations of a considerable fortune."

"My father has just informed me that if I marry Grace he will practically disinherit me. That does not change my intentions, of course, but I wish you to know just how matters stand, so that if you object to a poor son-in-law you may make those objections known."

"The readiness of the young fellow appealed to the gray-haired banker."

"My boy," he replied, "I am glad you have come to me with this statement. If the change in your prospects doesn't worry you, I guess it will not matter to Grace and I am sure it won't make the slightest difference to me. If you cannot earn enough to support two, I guess I have enough for my all."

Miss Wilson took the same view of the matter as her father, and the couple were married in the summer of 1890. It has been a happy union in every respect.

CUT OFF WITH \$1,500,000.

The elder Vanderbilt, however, was good his threat. At his death it was found that he had cut his son off from his fortune, nearly \$5,000,000, to his second son, Alfred G. The eldest son received but half a million outright and a full million in trust, the principal to go to his children at his death.

Alfred Vanderbilt proved generous and handed over to his brother about \$500,000 of the father's share of the estate that had come to him, so that after all Cornelius and his handsome bride were by no means penniless.

This fortune, modest for a Vanderbilt, has been largely increased through the industry and excellent business judgment of the young man. From three inventions for the improvement of steam locomotives had from several improvements upon the inventions of others he also derives a large income.

It was in 1901 that the next romance in the family culminated at the altar. Very brilliant was the wedding at Newport of Alfred G. Vanderbilt, by virtue of his father's share of the house, and Miss Elsie French, whose pretty face and charming ways had captured the heart of the young millionaire.

Alfred Vanderbilt was then 23 years old and his bride was two years younger. Their courtship had been ardent, and had been watched with the deepest interest by the select circles of the entire country.

When Reginald C. Vanderbilt, the youngest of the house, met his fate the following year in the person of Miss Kathleen Nelson knowing ones predicted that the wedding would not be long delayed, and it was not.

The match was vigorously opposed by the young man's mother, who thought her son too young to marry, as he was barely twenty-one.

More of a "high roller" than any of his name was Reginald Vanderbilt, reputed to be, and his escapades had worried his family not a little.