

Electric Washing Machines at Home

By ELIZABETH STORM FERGUSON

In 1915 the women's magazines were publishing articles endeavoring to prove to the homemaker that it was really an economy of time, money and energy to buy and use an electric washing machine for all home laundering.

In 1925 the question has been practically settled. There are no more convincing arguments for the power machine necessary. Every woman wants such a washing machine and many homes are now equipped with machines to do the home laundering with a minimum of time and strength of the operator, who is usually the mother and homemaker.

Today the bride, buying a washing machine for the first time, or the mature homemaker who wishes to replace her machine, decides, not between hand and power machines, but which type of a power machine she will buy. In considering washing machines, we find included machines operated by hand, gasoline, water and electric power. This article will deal only with the electric machines.

When a family sets out to invest from \$100 to \$150 in an electric washing machine, the task of selecting from the dozens on the market seems a tremendous undertaking. Every dealer claims his to be the one and only washing machine worthy of a place in the American home. The collection of designs, sizes, shapes and working principles leaves the shopper in a daze.

Practically every dealer will offer to set a machine in the home on trial for a week or two. This tells the experimenter about the one machine under test. There is no chance for comparison with other machines unless the prospective buyer asks for trials with several machines of different types and makes. Since this is not always practical, the buyer may partially make up her mind before she starts her shopping excursions.

There are four standard types of washing machines with one comparatively new type on the market at the present time, altho there are probably 150 different "makes" of machines from which to choose. The prime object of all washing machines is to force sufficient soapy water thru soiled fabric to loosen and wash out the dirt. The method used to bring about this action determines the "type" of the machine.

The "dolly" type of washing machine is the oldest. A wooden "dolly", resembling a milking stool, is suspended in the center of the top of the tub. It moves first one way and then the other, drawing the clothing back and forth thru the suds. Many dolly machines have corrugated sides and bottoms in the tubs so there is a slight washboard action.

The "oscillating" type of washer consists of a metal tub so arranged that it rocks to and fro, causing the suds and clothes to be splashed from one side of the tub to the other. Some makes of this type of machine have perforated trays in the bottom. Others are built with projections on the sides which tend to hold the clothes in such a position that there is free action of the suds.

In the "cylinder" or rotary type of washer the clothes are placed in a perforated cylinder, which is supported in a tub holding the suds. The cylinder re-

volves a few revolutions in one direction and then reverses the same number of revolutions. There are strips of wood or metal along the inside of the cylinder, which raise the clothes as the cylinder revolves, lifting them out of the water. At a certain point in the revolution they are dropped back into the suds.

The "vacuum cup" or suction type of washer works on the principle of the simple hand plunger, having a funnel on the end of a stick. There may be two, three or four cups, the latter working in pairs. In some machines these cups work up and down on a rod in the center of the tub and in others they are suspended from the lid or the side of the machine. Since the punching action would be of little value if directed at only one or two places in the tub of clothes, the machines are constructed so the cups move around or else the cups are stationary and the tub revolves.

The "gyrator type" is a comparatively new type of machine. The working part of this machine is a plate on which are mounted four stationary paddles. This plate sets in the bottom of the tub. It moves first in one direction and then in the other, swirling the clothes thru the water.

Altho there has been some experimental work done, no one has yet proven which type of washing machine does the best work, with the least wear and tear on the clothes. It is generally conceded that any type will wash satisfactorily under the right conditions—plenty of soap and water. In fact, several equipment specialists feel that a greater difference is made by the amount and temperature of the water and the kind of soap used than by the particular type of machine used.

There has been some discussion as to the ability of various types of tub materials to retain heat. It is generally supposed that a wooden tub retains the most heat in the water. Wooden tubs are much easier to move or work about when filled with hot water than are the metal tubs, since they are not so hot to handle. This might be a deciding factor with some buyer. The metal tubs are easier to clean, but the wooden tubs are cheaper. Some of the metal tubs are equipped with a gas burner so the water may be heated in the tub.

Size of machine is an important point in selection, since this determines capacity for clothes, the amount of water required and the floor space needed for storage. Most machines are rated by "double sheet capacity" or the equivalent in weight of other clothing. The double sheet weighs one and a half pounds, but the homemaker must use her own good judgment in filling the tub with soiled clothing. Five or seven pounds of handkerchiefs would circulate more freely in the suds than the same weight of blankets or other bulky material. If very soiled clothing is being washed a small load will insure better results.

For a small family a small machine would prove satisfactory since they would not wish to wash too many kinds of clothing in the machine at one time. The larger families could use a larger machine to advantage.

Where floor space is at a premium, the purchaser must figure carefully. Machines are long, square or round. Some have flat tops and may be used for tables between wash days, others are of such shape that they cannot serve any purpose between times. Some are easily moved and can be stored some distance from where they will be used and others are heavy and awkward, necessitating a permanent place to stand.

The height of the tub is of prime importance to the person using it. Many of the newer machines have "extension" legs, which allow the machine to be adjusted to the height of the worker, or to an uneven floor. Likewise, parts of a machine which must be lifted are to be considered. Light and easily moved as a cylinder of a machine of that type might be, it is awkward and difficult for a short woman to lift the cylinder from such a machine when it is necessary.

Upon the size of the drain in the tub will depend the speed with which the tub can be emptied and made ready for the next operation in the washing. Whether or not a lid must be lifted off each time the machine is opened is a matter of importance to housewives. Many women prefer the lids which are hinged.

There are single and double tub machines on the market. Whether a machine with one or two tubs is most satisfactory is entirely a matter of choice with the purchaser. The method of washing, the speed desired in completing the family wash and the water supply are all factors in making such a choice. If there is a plentiful supply of hot water and the clothes are not boiled, but are run thru a warm suds followed by a hot suds, the double tub machine would certainly be a time saver. However, if the water for the first tub had to be heated on the stove and poured into the tub and then the second tubful heated, there is some doubt about the value of the two tubs for the suds. Two tubs are always an advantage in rinsing.

If the white clothes are all boiled, a single tub machine would prove quite satisfactory with one or two portable tubs. If the homemaker is perfectly satisfied with her system of washing, she can make her choice by considering the place of either one or two tub machines in her own laundryroom.

Nowadays practically all wringers have safety devices which release the pressure on the rolls when the wringer is overloaded. These should be loose enough to serve their purpose, but not so loose that they fly away from the machine when the release is suddenly put into operation. Most of the newer models of machines have good safety control. The homemaker should know her safety control, keep it in order and practice using it.

The "centrifugal" wringer is a part of some machines. The perforated tub which holds the clothes is raised out of the suds, and is revolved at a high speed. This whirls the water out of the clothes. With this type of machine, the entire washing can be done without lifting the clothes from the tub, providing there is only one tubful. Clothing must be arranged evenly in the tub to equalize the

(Continued on Page 11)

HOMEMAKER AS CITIZEN

By Marion Elder

CHILD WELFARE BILLS PASSED

The main framework of the legislation presented by the Iowa Child Welfare Commission has been passed, according to J. B. Weaver, a member of the commission, who talked at the Iowa League of Women Voters' meeting at Des Moines.

The bills that have been passed are as follows:

1. A bill establishing a board of child welfare, which will function under the board of control. A trained worker is to investigate all necessary cases in the state.

2. There must be strict inspection and licensing of all child placing organizations, all maternity homes and all child boarding homes.

3. A corrected list of all feeble minded persons wandering unrestricted over the state to be filed in each county and people on this list will be prohibited from securing marriage licenses.

4. Support for all illegitimate children in this state will be provided.

"Institutional care is the very poorest type of care for a child. Our new child welfare bureau will always endeavor to try first to keep the home together. Institutional care should come last, for the child raised in an institution will always have an anti-social feeling toward life."

CONGRESSWOMAN

Mrs. Florence Prag Kahn of San Francisco, California, with three men opposing her, has been elected to finish the unexpired term for her late husband in Congress.

This is the second time within three years that a San Francisco widow has been chosen to succeed her husband in Congress.

In New York and Massachusetts are found more than one-fourth of all the women lawyers in the United States.

ELECTRIC WASHING MACHINES AT HOME

(Continued from page 6)

weight and secure the best results with the extractor. Since this type of machine wrings the whole tubful at once, it is quite desirable to have an abundance of line so all the clothes may be hung at once.

Control levers should be carefully inspected. Most women prefer all controls high on the machine to eliminate stooping, and out of the way of childish hands. Altho we agree that the laundry is no place for a baby, circumstances often make it necessary for toddlers to be with their mothers on wash day. For the same reason, motors, belts and all working parts should be enclosed.

The motors on most washing machines are one-sixth horse power, altho there

are some machines on the market with one-fourth horse power motors. Naturally, the latter would use more electricity. The larger motors are placed on machines which are used for other purposes, such as "hitching" an ice cream freezer or ironing machine to the washing machine motor. In this way, one motor is made to take the place of motors on other devices.

Tests made on washing machines show that the cost of electricity for operating one and a half to two cents an hour, depending on the size of the motor and the price of electricity.

Motors are made to operate on direct current and alternating current and also on lines carrying different voltage. The purchaser should make sure of these two points in buying a machine to be certain it will be satisfactory when installed in the home.

After available washing machines have been investigated, the prospective buyer may enjoy the privilege of buying the one which suits her the best with the assurance that it will give her on an average ten years of service if she gives it the care and consideration it deserves.

It is wise to buy a family washing machine from a reputable dealer who is prepared to render service on the machine, should it be necessary. Repairs for washing machines are not often needed but when they are, it is imperative that they are obtained at the earliest possible moment.

Machinery responds to care. With every machine comes a set of directions for the care and operating. A machine should never be operated until the person using it is entirely familiar with every oil hole and every grease cup, knowing just where to oil, what kind of oil or grease to use and how often it requires oil. A motor will last years with the right care but may be ruined in a short time thru carelessness and neglect.

Tests have been made which show that it costs less to operate the machine continuously than to stop and start the motor between loads. Thus from the standpoint of economy, it is better to allow the motor to run the entire time of the washing than to stop and start it between each tubful.

The motor should never be turned on when the tub is in gear. Several revolutions of the motor are necessary to get up the required speed. When the motor is required to carry the tubful of clothes and water while working up speed, there is danger of burning out a fuse, thus it is wise to allow the motor to reach its maximum speed before throwing the machine into gear.

Tubs require care in accordance with the material of their construction. Again the directions which comes with a machine should be followed explicitly. Manufacturers are anxious that their machines should outlive their guarantee so their instructions in care are carefully tested before being given to their customers.

It makes comparatively little difference which type of washing machine is chosen for the home laundering if it is a standard make for which repairs are readily obtainable, if it is given proper care, if plenty of soap and water are used in washing and if the machine is not overloaded.

The press gallery of the British parliament is now open to women and the first one to take advantage of the privilege was Miss Stella W. Murray.



It will make your work easier and your grades higher.

Reynolds & Iversen
Ames News Stand



Captivating

The versatility of our Spring Strap Pumps is truly amazing. Yet, with all their variations there is one dominant note—Simplicity. It is this concession to the essential of good taste that makes these strap pumps so captivating. Any one of several styles will enhance the becomingness of your Spring costumes.

We cordially invite you to come to our store and look our line over and compare our prices before you buy your next pair of shoes.

BAUGE & SON
Shoes That Satisfy
Ames, Iowa