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## Department of Household Administration

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### WASHING MACHINES

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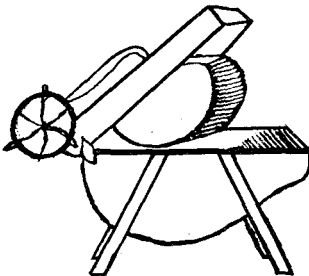
**Object of Washing Clothes.** We wash clothes to remove soiling materials. We wash clothes for sanitary, aesthetic, and economic reasons. Washing is accomplished by forcing warm soapy water through the fabrics.

**Methods Used.** (1) Entirely by hand. (2) Hand-power machines. (3) Water-power machines. (4) Electric machines.

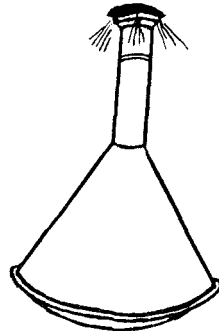
**How to Judge a Method.** (1) Does it give the desired results? (2) Does it wear the clothes? (3) Does it fatigue the worker unduly? (4) Does it take too much time? (5) Does it cost too much? (6) Does it pay for itself in the end even though expensive in the beginning?

**Types of Equipment.** *Wash board.* Results come from forcing suds through fabrics. Hard rubbing not necessary for good results; always slow. Rubbing of clothes over a corrugated surface injures them.

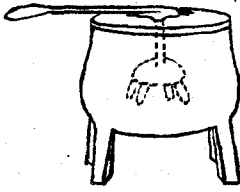
*Vacuum boiler washer.* (See illustration at right.) Results obtained by water circulating through clothes by force of suction. Good for slightly soiled clothes cleaned in small quantities. Easy on clothes. No friction.



*Cradle type.* (See illustration of this type of machine at left.) A corrugated board rocks over a corrugated bottom with clothes in between. Clothes are cleaned by friction, and even though this type of machine cleans clothes well it is hard on them.

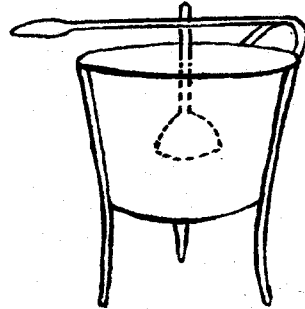


All the illustrations except the last are based upon figures in *Housewifery*, by L. Ray Balderston, published by J. B. Lippincott Company, Philadelphia, Pa.

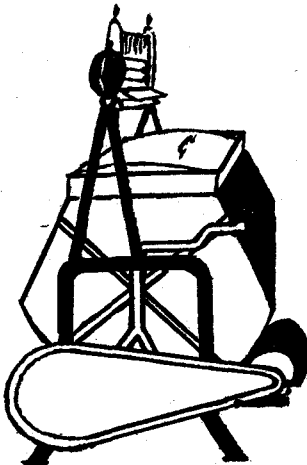
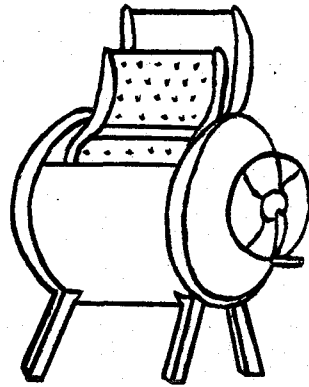


*Dolly type.* This machine is generally made with a wooden tub. The clothes are cleaned by agitation and friction over the corrugated bottom of the tub. If the machine cannot reverse the rotations of the dolly, the clothes become badly tangled. This type of machine is also made for use with water and electric power. Friction is hard on clothes.

*Pressure and suction machine.* (See illustration on the right.) The funnel which is attached to a lever cleans the clothes by forcing soapy water through them. There is no friction and no tangling of clothes. This machine is made with two or more funnels in several good electric washers.



*Rotary type.* (See lower illustration on the right.) Clothes are cleaned by agitation, being placed in a cylinder which revolves in soap and water. This arrangement is made in hand and electric power machines. Tangles clothes badly if cylinder does not reverse.



*Oscillating type.* (See illustration at left.) These machines are usually operated by electricity and get good results by agitation caused by tossing clothes from one side of the tub to the other. These machines are usually made of metal.