

# EXPERIMENT STATION TO SOLVE HOUSEKEEPERS' PROBLEMS

## Mrs. Frank A. Pattison Heads a Movement to Give Practical Aid to Tests of Inventions That Lighten Labor and Effect Economies.

OUT in Colonia, N. J., which is a charming little country place not very far from Rahway, there is a large, attractive house, with a wing on one end. To look at it you would say it is just a pleasant country home, but if you should stop to investigate you would discover that it was not only that but much more. Part of it is the Household Experiment Station of the New Jersey State Federation of Women's Clubs.

The main part of the building is the habitation of Mr. and Mrs. Frank A. Pattison. The experiment station is the wing. It is not a very large station as yet, but it is the beginning of a happy idea as ever entered into a clever woman's head. This is the way it began:

Mrs. Pattison is the President of the State Federation of Women's Clubs, an organization of fifteen or sixteen thousand women, which believes in doing practical things. It does not meet to discuss Browning or to hear papers on the philosophy of Plato written as the result of an hour's frenzied perusal of the encyclopedia. It is a working federation, and it has set itself to be useful not only to its members, but to the community at large.

New Jersey is a State where the people live in homes—that is to say, real houses with an up and down stairs—a kind of thing only millionaires have in New York, and, since the federation is made up for

problems because they know what bored women are who tell you the awful things that Mary Jane did to the steak and how Ellen left at a moment's notice because she did not like fried ham, &c. A sort of silent pledge has been taken by women not to talk about their household troubles, and these stay bottled up inside and usually come out in appendicitis or some other form of operation.

"We women of the State Federation of Clubs have made up our minds that our particular work is to help in these questions here and now. We know that as soon as women get together and decide what they want, what must be done, the end of the trouble is in sight. The men are ready to help, not only ready but eager, because it will mean besides increased comfort a business opportunity as well.

"We have got to find out what women are grasping for. We have got to formulate their demands. We have got to study the situation in detail and then we must set the standard of what should be forthcoming. Our Household Experiment Station is an attempt to standardize the demands at least of the club women of New Jersey for labor-saving devices and pure chemical foods. In this as in every other question that confronts humanity the men and the women must work together toward a solution. Neither of them can settle the question alone.

good deal of it. The task that we have set ourselves involves an enormous amount of correspondence, very much more than the average woman could undertake for herself.

"I said that our work had already begun. This was about two years ago when we began to demonstrate the uses of the fireless cooker. They were just getting on the market at that time, and we thought it might be a step toward relief. But they did not always work. Some women who had hailed the idea as a wonderful device for lessening the drudgery of housekeeping had spent \$15 or \$20 for a cooker and then found that they might as well have thrown their money away.

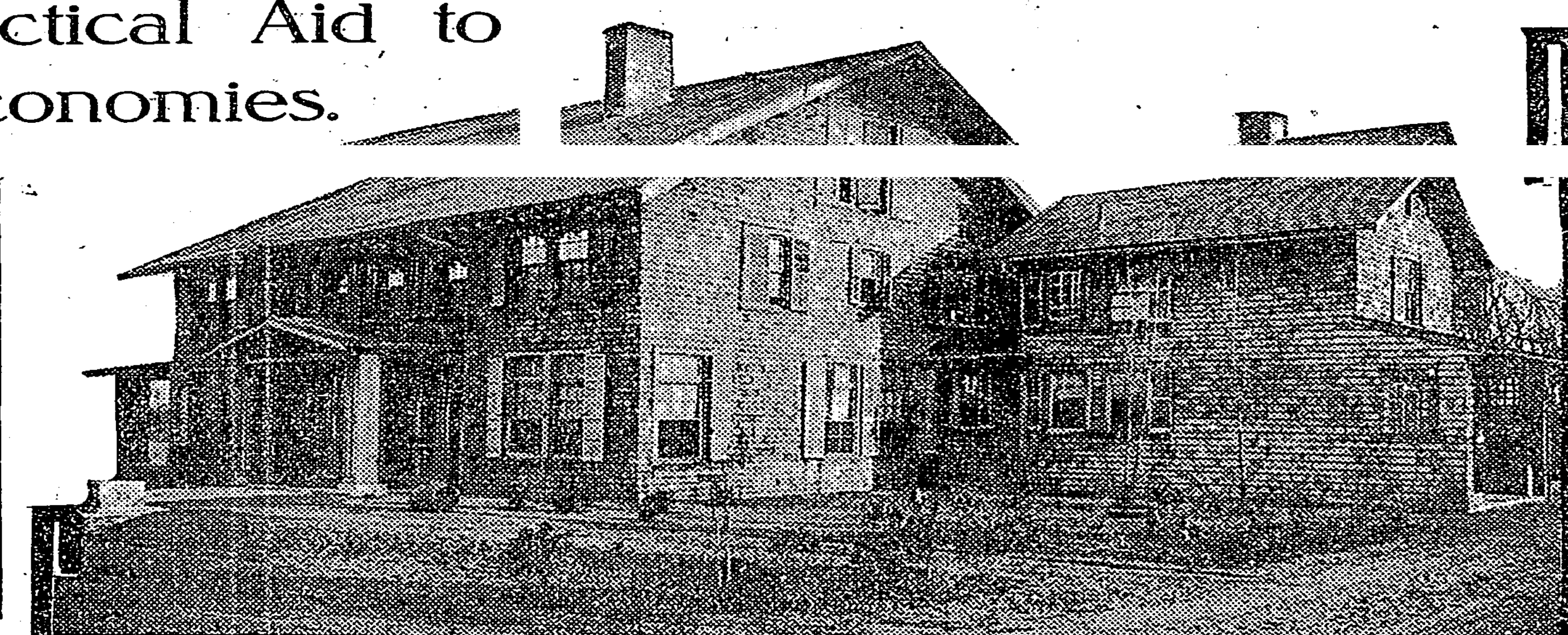
"We had the idea of testing the various inventions, finding the best and telling the women about it. We determined to send the manager of our Household Economics Department through the State with nothing but a staff and a fireless cooker, if need be, in her hands and see what she could do to help the situation.

"I remember how frightened we were at the first demonstration. The cooker had been late in arriving, and although we knew the make was good, we could not help our alarm for fear there would be something wrong with that particular machine. We put the food in and carried the whole thing off to the club where we were to demonstrate, and we certainly were panic-stricken, but everything went

where almost any woman would find her particular troubles worked out for her.

"The State Federation had already done some work in connection with the Public Service Corporation of New Jersey. We got them and a firm which makes paints and things for household decorations, and an establishment which supplies modern household utensils to cooperate with us in equipping the station. We built a little extension to what was my own kitchen, and it is nearly ready now for the work of showing women how they can save their time and money.

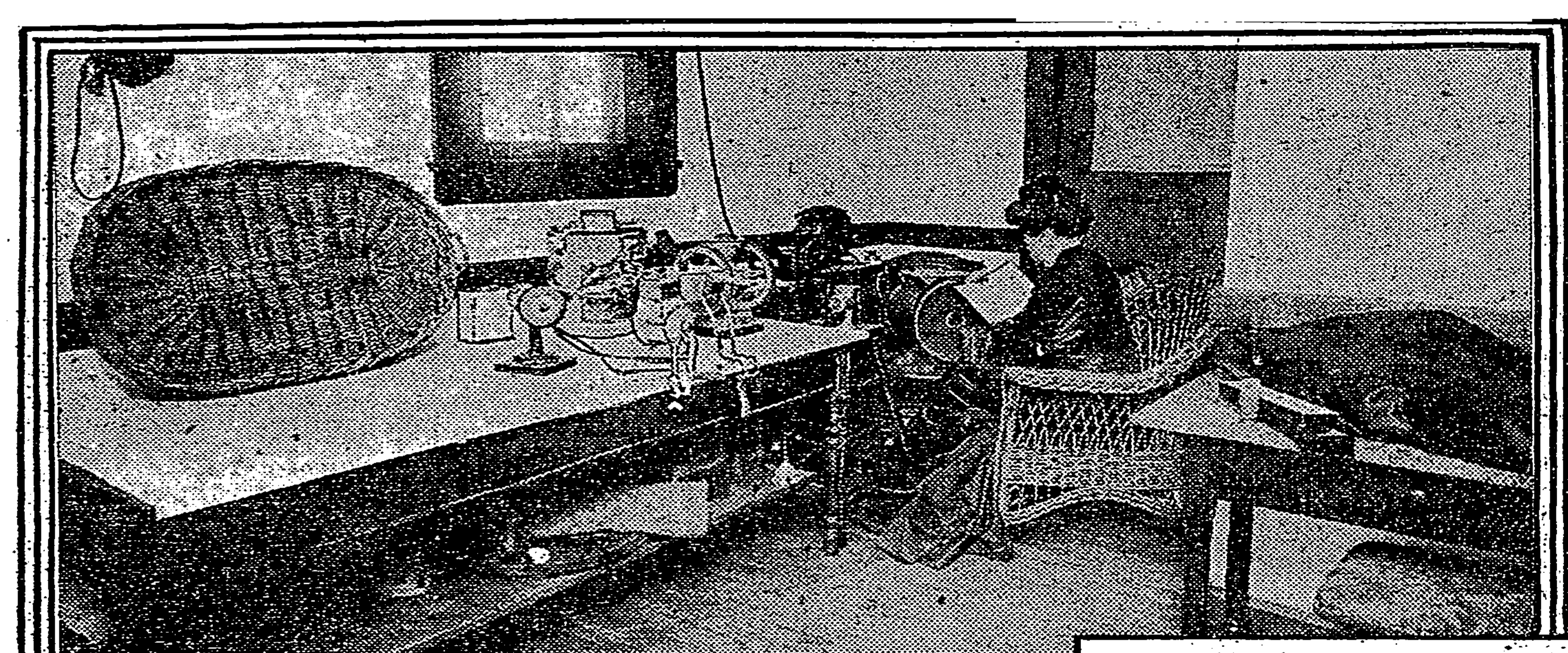
"Everything is on an extremely small scale, and the kitchen will, of course, be a good deal of a jumble, since we will install four different methods of cooking,



The Home and Experiment Station at Colonia, N. J.



Mrs. Frank A. Pattison.



Mrs. Pattison Experimenting with Household Labor Saving Devices.

the most part of women like these, it occurred to Mrs. Pattison and other bright spirits associated with her that it might be a good scheme to see what could be done toward making the home a better and easier place to live in. For there is no denying that certain sides of domestic life have become distinctly trying within the last few years.

The aim of the Household Experiment Station is to consider the problems that women have to meet every day in their homes, and then to look for solutions. Things have got pretty bad in New Jersey, as elsewhere, but it is absurd to say that there is no way out. Because women cannot get servants and cannot do this, that, and the other, the privacy of home life need not necessarily be given up for the refuge of some hotel.

That, at least, is Mrs. Pattison's idea, and she told about it most interestingly. She knows what she is talking about, too, for she has a splendid big house that she manages to look after pretty nearly unaided; at the same time she can find her work in connection with the clubs, and is able to sit down and talk entertainingly with a caller a couple of hours.

"We felt," said Mrs. Pattison, "that a crisis had come in the affairs of the house. The burden of housekeeping under present conditions has come to be almost more than can be borne. There has been a lot of talk about it, and the fault has been laid here, there, and everywhere. Placing the blame does not alter the facts in the case. Making a home for her husband and family is a hard matter to-day for any woman who has not considerable means.

"There is, of course, the eternal servant problem to begin with. The fault may be with the mistress or with the maid or with society in general, but the fact remains that the competent general houseworker is so rarely found that she may be called practically extinct. Women who go into domestic service try to specialize and to find employment in the homes of the rich, and the woman of moderate means is left high and dry.

"Then there is the increased cost of living. Things have gone up faster than the salary of the man of moderate means. The woman is confronted with the necessity of saving. At the same time she knows that to reduce the amount of nourishment the family needs by buying cheap foods is poor economy, and she is bewildered.

"There is a good deal of scientific study of household economies, but most of it does not reach the average houseworker. She reads about the food values of meats and vegetables. She knows that she has a duty more complex than that of satisfying the family appetite, but the whole subject is too involved for most women readily to grasp.

"There are various other smaller annoyances that add to the burden. All the work that can be done by more or less expert men is specialized. You cannot get a 'handy man' any more. A plumber must attend to the plumbing, an electrician to the wires, no matter if the trouble be a trifling one, and every woman knows that the average workman coming into the house may mend the particular trouble for which he is sent for, but he is nearly always likely to leave some sort of other destruction in his wake.

"On the other hand, there are several encouraging features. All this study of domestic science must have its effect on every household in the course of time, although up to the present none of the colleges train people who can be called 'household workers.' They are always specialists of some sort. Further, women are learning the value of co-operation, and have discovered that organization can do what nobody can accomplish alone.

"The time may come when every woman will be scientifically trained to run a home, but it has not come yet, and the question that presents itself to us is what are we going to do about it now, how are we going to help the women who haven't the time to work out these things for themselves and yet who need some sort of help at once?

"The whole question has reached a stage of perfect degradation. Intelligent women no longer discuss their household

"There are in this country and in England thousands of patents of labor-saving devices—literally thousands. Some of them are excellent. A great many of them are of no use at all. The same idea may be contained in several mechanical inventions of different makers. Half may be expensive and useless, and the other half just what women want. It is our business to find out the good things and steer the women away from the bad ones.

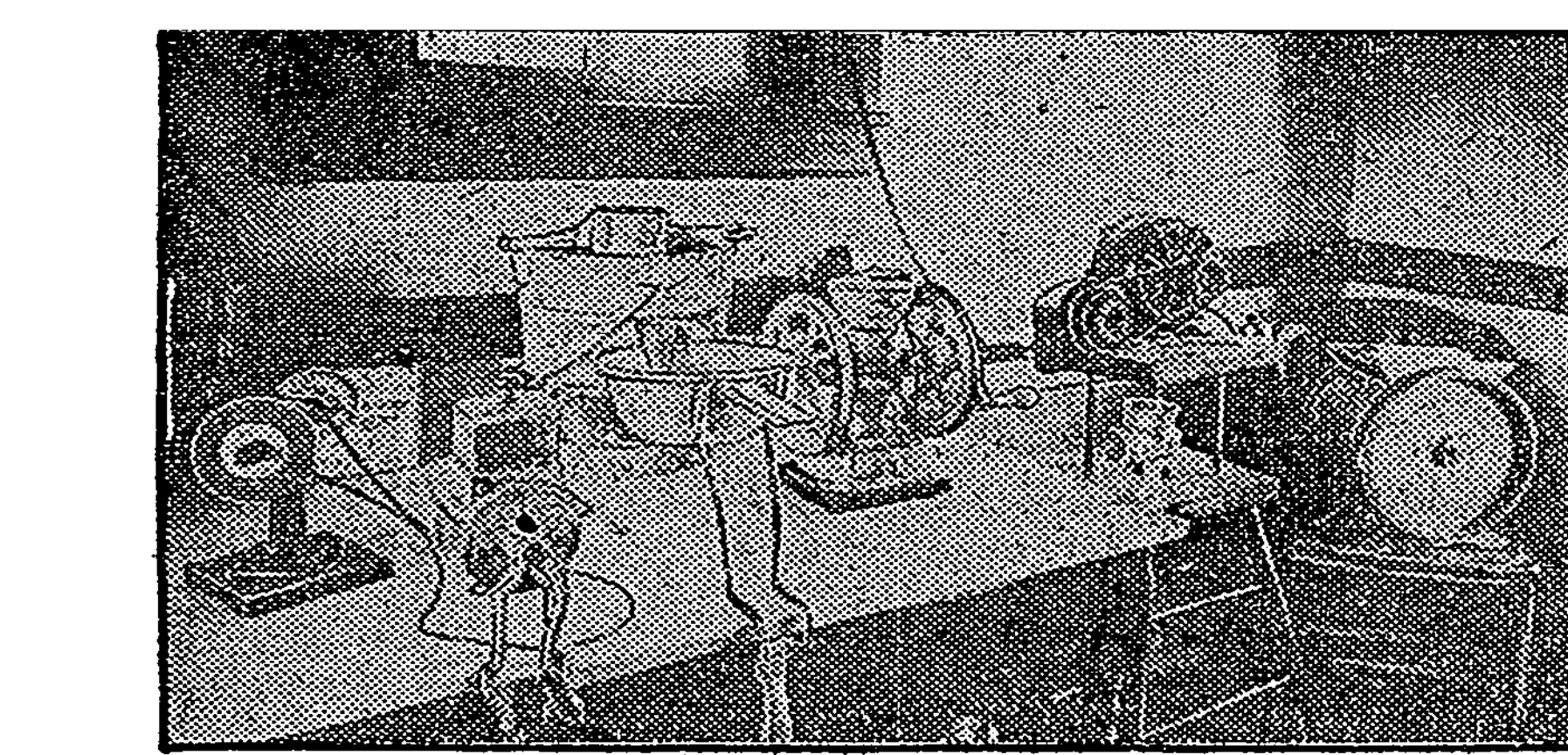
"A great deal of the indifference among women to labor-saving devices comes from the fact that pretty nearly everybody has been cheated with them at one time or another. There is one magazine which appeals generally to the women and which excludes from its advertising columns anything that is not as represented. They ran an advertisement of a labor-saving device and had it pointed out to them afterward that that particular bit of machinery was quite useless, so they announced that they would refund the money to any one who had bought the thing from having seen it in their columns. Nobody sent in an application for the refund.

"No doubt dozens of women had bought the invention, but when they found it did not work had said merely, 'Cheated again,' and dismissed the matter from their minds. They were not going to fight about it because they thought it useless. You cannot use your energy running a household as it is organized to-day and have very much left over for fighting.

"The State Federation is going to do the investigating and the fighting for them. We have already begun, and in a few weeks we will have this experiment station well under way. For a long time we have been working quietly and collecting an enormous amount of information from all sorts of manufacturers."

Mrs. Pattison indicated a desk covered with scores and scores of letters.

"I have just been trying to get my mail in shape," she said. "You see there is a



Inventions Devised to Lighten Household Labor.

to perfection. It was a ham we tried to cook, about the hardest thing there is, and none of us had ever tasted better. There was no doubt about the success of that particular cooker.

"For some time the head of the Household Economics Department demonstrated the cooker. That was all very well as far as it went, but it did not go far enough. Then an incident made us think of the establishment of a real experiment station.

"In a little house on the edge of a wood we found a gentleman with his wife who were demonstrating the possibilities of housekeeping with denatured alcohol. Their entire establishment revolved around denatured alcohol, for heating and cooking and everything else.

"I went to see them and was very much impressed with what they were doing, and then we got the idea. 'Why not have a little house and demonstrate not only denatured alcohol, which is suited for one class of house, but gas, electricity, every new idea in the way of housekeeping? Some people cannot have one and can have the other.' We thought we would like to have an experiment station

but we hope that practically every woman will find there the germ of an idea that she can enlarge and apply to her own home.

"We will equip the place with a coal range, a device for cooking by gas, for denatured alcohol and for electricity. We were, perhaps, a little weak in putting in the coal range, because we don't really believe in it at all. Perhaps, after a while, we will do away with the old-fashioned range, which can only demonstrate how not to do it.

"The remaining three methods of cooking, alcohol, gas and electricity, are suited for different kinds of houses. Perhaps some houses could use to advantage a combination of two. We want to show the wastefulness of using coal. The dirt, of course, we know about."

"How about broiling?" asked her interested visitor. "What takes the place of coals for that?"

"Of course, broiling is a question, but it hardly seems necessary to have a great big range for that. There is no reason why there should not be a pan arrangement of some sort in which a charcoal fire could be lighted, and perhaps a small

chimney to take away the odors. It takes only a few minutes to broil steak and that is hardly sufficient reason for keeping up a costly and dirty range. Anyway, they use charcoal and wood in the best places for broiling, not coal.

"Gas, of course, everybody knows is invaluable for cooking. Alcohol, too, can do wonderful things and has been applied in a remarkable way so that in houses isolated where there is no possibility of gas or electricity, almost every convenience, hot water in the boiler, all that sort of thing can be secured by using alcohol in a scientific way.

"But we believe the future belongs to electricity. That will solve the problems that are perplexing the women to-day. It is true it has not been applied to the kitchen, to any extent, but that is largely because women have not decided what they want. They have not given the inventors and the electric companies something definite to work upon.

"The result is that many of the electric appliances on the market are clumsy and expensive. There is no reason to believe that within a few years women will not be able to buy inexpensive labor-saving devices, to be run by electricity, and it will probably be perfectly possible to have one motor in the cellar that will light the house, wash the clothes and the dishes, and polish the knives, and do endless things that we are now doing by hand: Come into the kitchen a minute and you will see the beginning."

Mrs. Pattison led the way to a small kitchen. It was full of strange objects, queer shaped ovens, and odd, black things standing on long legs.

"This," said Mrs. Pattison, "is my electric motor."

It was a small thing she touched, and

it did not look like the solution of anything, but she wheeled it up to the coffee mill, slipped a pin somewhere, turned a crank, and in ten seconds the motor was working like a galley slave, grinding the coffee. After a minute Mrs. Pattison stopped it, drew out the pin that connected it with the mill, and explained that it would turn the washing machine, chop up the meat, or polish the silver, just as energetically as it had ground the coffee.

"This motor is not perfect by any means," said Mrs. Pattison. "but it shows that we are on the right track. I paid \$75 for it with the coffee mill, the polisher, the washing machine and the chopper included. It was quite a sum to put down at the start, but you see what a saving it is in labor.

"Calculating the cost of things, by the way, will be a very important part of our work. We have to show the actual cost of labor-saving devices and then compare the cost of the labor it saves. If a woman does all her own housework it will still be money to her to save time, for in that time, besides the benefit of some leisure, she will have an opportunity to learn to do many things that are now impossible to her—dressmaking, decorating, and so on.

"This," she said, turning to another strange object that looked something like a wash boiler, "is the dishwashing machine. We had a great time getting this and it is not a very satisfactory one, though it is the best on a small scale in the market so far. I wrote to every firm that dealt in such things and I would get back answers that they had a very admirable dishwashing machine that would wash a thousand plates a minute, or something like that, and had been used in various hotels. Then they would add: 'We have nothing as yet for the small kitchen, but we have some plans for such a model.'

"This is worked by hand," said Mrs. Pattison, pumping the handle up and down. "You put the dishes in and have plenty of hot water, and this stirs them round and gets them clean. Then you drain the water off, and if it has been boiling hot you don't need a dish towel. They are perfectly clean as soon as they have cooled. Before long we hope to have a machine which can be attached to the electric motor.

"In the kitchen of the future, not of the remote future, but of the next few years, there will be such motors doing most of the hard work, and there ought to be a chute by the sink down which the garbage can be thrown. It will go down to an incinerator in the cellar.

"A model of such a thing has just been invented in Europe, and it works very well. I cannot give you the details. I can only say that it does what you expect it to do, so that there will be no more handling filthy garbage, no more bad smells, and no more unsightly carts going about to collect refuse. Of course, if these incinerators can be installed in private houses there is no reason why every apartment house should not have one."

"What about the rest of the house, Mrs. Pattison. A paragraph in an English paper the other day mentioned a patent bed maker which turned the mattress and tucked in the sheets by machinery. Is there such a thing in this country?"

"Not that I know of," said Mrs. Pattison, laughing. "I know, however, there will be a change in the kinds of beds we sleep on and they will be less difficult to manage. Every new step in bed making tends toward simplicity and hardness, which makes them easier to care

for. The soft mattresses that our grandmothers delighted in and were so hard to care for are rarely seen now.

"But though there may not be a patent bed maker, there are found a few devices which make general housework simpler. There are, by the way, the vacuum cleaners that draw the dust from mattresses so they need not be turned every day, vacuum cleaners which do away with the strain of sweeping, and of course it will be a part of our Federation to find out which are the best cleaners for the various purposes that our women will have need for.

"There are chemically treated dusters, too, on the market, which absorb the dust without soiling the hands and which can be washed out and used again and again. The average woman does not know about all these things, and if she does she is afraid to buy because she knows the chances are even that she is going to be cheated. We believe that when she knows where to turn for accurate information, she will joyfully buy them, and of course, the men will joyfully sell them to her.

"A part of our work will be to find the best foodstuffs at the most reasonable prices. Here again we are going to be very specific and mention names. We mean to recommend the very best in the market, and if any dealer wants our recommendation he has only got to come up to our standard.

"For our foodstuffs we are going to ask the advice of Dr. Wiley and every other expert we can get hold of. We are going to search out all the Government reports have said on the matter and give the information in simple, practical form for any woman who chooses to come to us.

"Upstairs we are going to have a small model dining room, where we will try out devices that economize space and trouble, and a bedroom of the same sort. We will experiment with colors and various ways of treating the wall, using all the healthiest and prettiest ideas we can get hold of and applying them as may be needed by different women.

"Just as soon as housekeepers begin to take a scientific view of their duties, just as soon as they begin to get together and say, 'What do we really want—what will make the work of the house easier and better?' then the whole question of household service will be put on a new basis.

"It seems perfectly useless for me to argue about girls going into service. They are not going to do it because the conditions under which they work are centuries behind the times. The theoretical attitude of the employers toward the houseworker is that of owners toward slaves. It is all well and good that we are scared to death of her—that we give her everything she chooses to ask for. The theory remains. Any time she has to herself is hers, not as a right, but as a gift from us, and she feels it, and she is not going to be persuaded out of this feeling.

"But as soon as housework becomes scientific, the theory as well as the practice of the thing will change. In our own day we have seen the change of public attitude toward trained nurses. It was not very long ago that they were unskilled and often of a low class. They have come to be respected by every one because the whole profession has been elevated by the application of scientific methods.

"Nothing that a general houseworker has to do is as dirty and disagreeable as much of the trained nurse's work. The lady of refinement, however, does the nurse's work because it is respected and the intelligent working girl won't do the servant's more agreeable work because it is not respected.

"The houseworker of the future, man or woman, will have to have some knowledge of mechanics and some scientific instruction, as well as a knowledge of house decorating and things like that. She won't be the raw, illiterate girl any more. She will have her hours of work, like any other member of a skilled trade. She may have a half-dozen houses under her care. Anyway, she will be a person of importance in the community, as she ought to be.

"Through economic changes women have gone out into the world and done well, but, after all, her heart is in the home. She will be glad to go back to do the work of the home as soon as it is made labor that the intelligent woman can enjoy doing.

"Not only do women love to run a house, but there is no more healthful occupation in the world if it is not made drudgery. There is not a motion of the body that housework does not call for. It is the best possible sort of exercise, only, of course, with that as with all other forms of exercise, it must not be overdone, and the average woman has to overdo it nowadays.

"And for the mistress of the small home, there is salvation ahead. Ninety per cent. of the women in this country keep no servant. A woman of moderate means can do her work with these labor-saving devices and have plenty of time left for outside interests, instead of being, what she often is now, a slave to unnecessary toil. From learning how to keep her own house she will be able to help keep the municipal house in order, for, after all, keeping the city clean and healthy is only an extension of what women have been doing in their homes for centuries.

"The more I go into this thing," concluded Mrs. Pattison, "the more I realize how far reaching it is. We believe that we have struck something women want. We believe that they are going to come here in considerable numbers and write in larger numbers, telling us the troubles they have to meet and asking for help. Anyway, we are going to give the thing the fairest kind of trial."