

UNITED STATES DEPARTMENT OF LABOR

FRANCES PERKINS, Secretary

WOMEN'S BUREAU

MARY ANDERSON, Director

"EQUAL PAY" FOR WOMEN IN WAR INDUSTRIES

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LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,
Washington, October 3, 1942.

MADAM: It is of the utmost importance to the men leaving industry for the armed forces, as well as to the women war workers, that wage standards should be maintained at this time when large new groups of women are carrying on war industry production.

I therefore take pleasure in submitting to you a report showing the findings of the Women's Bureau as to various aspects of the subject of women's wage rates.

The recommendations made are based on reports of Women's Bureau field agents who have made recent visits to plants engaged in war production, and on some of the best experience available in this country and England. The material was brought together and the report written by Mary Elizabeth Pidgeon, chief of this Bureau's Research Division.

Respectfully submitted.

MARY ANDERSON, *Director.*

Hon. FRANCES PERKINS,
Secretary of Labor.

“EQUAL PAY” FOR WOMEN IN WAR INDUSTRIES

Women in industry today are working side by side with men with similar duties. Many women also are taking over work formerly done only by men. There is no doubt that such cases will increase markedly as the war needs for industrial labor become ever more acute. For this reason it is vital to establish sound standards for women's wages. It is important at this time for the Women's Bureau again to call attention to its policy, formulated in 1918 when war production problems arose that were similar to those of the present, and since then repeated many times. The Women's Bureau policy on this subject, now upheld by many official agencies, is that—

Wage rates for women should be the same as for men, including the entrance rate.

As women workers are called more fully into war production, there are several reasons why it is an essential part of the efficient conduct of the war to provide adequate wage standards for these workers, many of them new to industry.

1. To keep up the health and morale of the workers who supply the sinews of war is as important as to develop the physique of the soldier. The worker's wage is the basis of health and morale; it must be sufficient for support.
2. It is basically unfair to pay one worker a lower wage than another for substantially the same work.
3. Men leaving to go into the armed forces must be able to feel that the women who carry on in industry are not being forced to undercut established wage standards.
4. It is sometimes argued that men's wages are higher because they support families. But today a large percent of the employed women also support dependents. This will be increasingly the case during the war (even with the family allotment). Moreover, young men without families are not paid a lower wage because of having no dependents.
5. Every effort must be made now to prevent a disastrous slump after the war. Keeping up the industrial wage standards during the rapid entrance of new women workers is one important block that must be laid now toward building the post-war structure.

Men's and Women's Jobs

Today both men and women are working on jobs similar to those women always have done in peacetime; both men and women are working on jobs formerly done almost altogether by men; both men and women are working on jobs that, through the traditions of World War I and of arsenal employment then and today, might be considered women's; men are working on jobs in one plant that women are doing in a plant having similar production; men and women are working side by side on the same work in the same plant.¹

The great majority of occupations and the industrial processes of today are in no wise exclusively men's or women's.

As far back as 1930, women were found in all but 30 of the 534 occupations classified in the census. More recently, newer types of work have appeared on the horizon, and women have been employed in many jobs not before done by them. A recent survey by the United States Employment Service found that women could perform 80 percent of more than 1,800 processes in key war industries.

Sometimes, but by no means in all cases, plant changes are made when women are put on processes they have not before performed in the plant. Such changes are no greater in extent than those that progressive industry constantly makes for a variety of reasons in order to keep abreast of invention or newly devised work methods. These improvements cannot properly be charged against the workers.

The employer makes the capital outlay on changes in process in order to facilitate production, to market a newly needed product, to effect some saving, and so forth. He introduces women for similar reasons, and thus makes use of an available labor supply in a time of need. Data on women's output (given a few pages farther on) show that in the end he gains thereby. Changes made for this purpose are a matter of engineering efficiency, and in no wise an expense to be borne by the women workers.

¹ See, for example, jobs women are doing in aircraft, ammunition, and instrument plants, described in Women's Bureau bulletins 189-1 to 4, and 192-1 and 2. Formerly, men and women rarely were found doing exactly the same thing in just the same way, but this is much less true in the present. Women now are found in new jobs doing all parts of the process, as for example setting up their own machines and so forth.

Light Work

It is common to hear it stated that women in industry are doing "light work" or the "light repetitive" rather than the "heavier" jobs. The lightness of an operation does not indicate the degree of skill it requires, and does not form any adequate basis for wage determination.

A "light" job often represents a high order of skill, exacts a large share of the worker's energy, and is of great importance to the product. Accordingly, the wage rates should be high enough to fit these characteristics of the job.

Such work frequently requires a delicate and careful touch, manual dexterity, rapid machine operation, quickness of hand and brain. Examples of jobs that might be classed as "light work," though they require a high degree of skill, are the assembling of the fine parts of aircraft or ship instruments, or of a time fuze; the screwing together in proper arrangement of different small parts of ammunition for artillery pieces; the final inspection of small aircraft parts as fast as they are turned out; the assembly of an electrical system for an aircraft instrument board, or of the entire instrument board; the operation of a press stamping out small metal parts; or of a drill making fine holes at exactly the proper places in small metal parts. (Women are found changing and sharpening their own drills where it is customary for the drill operator to do this.)

Obviously these so-called "light" operations require a greater degree of skill than that of the moveman or the material handler who lifts heavy weights or heavy boxes or carries heavy lots of work.

A "light" machine requiring great speed of operation or the accomplishment of a quick monotonous process may be far more exacting, actually may use up far more of the performer's physical energy, than work requiring chiefly muscle or brawn and entailing but little dexterity or judgment. It may be far more important to the product than some of the heavier jobs, and may be worth a better wage. Repetitive jobs call for a large degree of concentration or continuous application, and if they involve following the machine, failure in concentration may mean physical disaster to the worker as well as ruin to the product.

The Saving of Skilled Labor

The process performed by the worker is not the less skilled in character because a helper or a machine does any heavy lifting involved, nor is it in fact less skilled than the operation of a heavier machine on which other requirements are no more exacting. On the heavier as well as on the lighter machine, whether operated by men or by women, the addition of lifts or of a helper for several operators often has been found to effect a saving.

Heavy lifting or carrying now is more and more done by machine power, and the introduction of mechanical lifting and handling devices is not in itself a basis for lowering wage rates.

Industry of today more and more eliminates the use of human beings to provide the heavy manual labor. Instead it employs human capacity in skillful manipulative processes, and jobs requiring a high degree of dexterity. One of the most important values of the machine age is that it can free human beings from exhausting physical burdens. Examples of practical methods used by engineers to reduce human lifting follow:

In an aircraft plant, suspending an air-operated wrench from a counter-balanced support had eliminated the necessity for lifting and handling. A woman replacing a man in the use of the wrench was able to operate two such counter-balanced air-driven wrenches simultaneously instead of the one formerly operated by the male employee.

In a machine-tool plant multiple spindles were attached to milling machines, making it possible for a girl to operate four machines with fewer steps from one to another.

The proper conservation of labor is a factor vital to the whole organization of production, to employer as well as worker, and to the Nation's very life. When the need for output is great, skilled work and skilled workers must be used to the best advantage.

It is no economy of labor to employ the brute strength of human beings for heavy jobs; they can be done by machinery and thus release human labor for processes of greater skill, delicacy, or dexterity, such as exist widely in industry today. Much of the effort to train new workers and to upgrade workers is based on the principle that it is no economy of labor to employ on an unskilled job a worker capable of developing

greater skill. It is in line with this policy to use machinery wherever possible for the heavier lifting or carrying, and this especially can be done on new jobs and in new plants.

Furthermore, it sometimes has been found to be economy of management to provide a set-up man for a group of machines, whether operated by men or by women. But there are cases where this is done for men as well as women, and in an increasing number of instances the woman operator sets up her own machine just as the man does.

Women's Output on the Job Compares Well With Men's

One of the first questions the employer wants answered when he considers women's wage rates relates to their output and the efficiency of their work. There is a considerable body of evidence that the industrial efficiency and the output of women are as satisfactory as those of men, in some cases more so. Especially is this true where the individual is properly suited to the job and the conditions of work are adequate.

In particular, women are found more proficient than men on certain operations that require care in measurement, fine handling, or light skilled work. Women compare favorably with men, too, in learning time, in some cases learning more rapidly; considering women's inexperience in mechanical training, this is an especially good record.

In packing and inspecting link belts used for feeding ammunition into machine guns, women's output in a Government arsenal was reported to be 40 percent greater than men's.

More mechanical time fuzes are being produced per employee than ever before in a Government arsenal where 96 percent of the employees at work on them are women, though a few years ago only 2 percent were women. Some part but by no means all of this can be referred to changes in the process, but the foreman felt strongly that women's production on these tiny parts was far superior to men's.

Other processes in Government arsenals in which women in some instances have been found to produce more than men are in the operation of internal grinding machines formerly operated only by the most skilled men, and on several types of machining operations in the manufacture of rifles.

Women learned faster and did more careful work than men in inspecting operations in the manufacture of cutters for gear shapers,

which involved careful measurements by the use of optical comparators, laboratory microscopes, circular pitch machines, cone machines, and other special measuring devices.

A woman operating a sensitive drill in an aircraft plant had maintained a record of double the output of the man formerly on the job.

In machine-tool plants, women who had been employed only a short time were reported doing well in production on milling machines, drill presses, gear hobbers, grinding machines, and inspection. In one case a woman's work exceeded that of most other workers, including men, in grinding broaches for barrel-rifling machines, setting up her own work, and grinding to almost inconceivably fine tolerances.

A girl spot welder in an airplane plant had more than doubled the previous records of boys on the same job.

✓ Women doing acetylene gas welding on stainless steel manifolds for aircraft engines had passed Army-Navy weld tests two to one better than men on this operation, which is light but very skilled work—in fact it is one of the most difficult types of welding.

✓ Recent surveys of California firms employing significant numbers of women in different industries found that in all cases there was an increase in production per hour, and a lowering of cost per unit, particularly where women were employed at the same wage and on the same jobs as men.

The management of major metal plants on war production of parts recently stated to a Women's Bureau agent that women meet the schedule well, in some instances better than men, and often produce more than men. This is verified by occasional time-study checks.

In aircraft manufacture a drilling operation required that a very small hole be drilled in small metal pieces. A man on the job drilled 650 holes a day; when a girl was put on she kept up a record of 1,000 holes a day.

In aircraft plants: On jobs in the woodwork shop, girls were working as fast or faster than men; in the tubing department output increased more than the proportion of women added; a 2-year plant record of men had been broken a few weeks after women were put on such work as inspection, machine-shop operations, precision assembly, sheet-metal work, tail and wing assembly, shearing, trim-shop work, and other occupations.

Certain of the studies made during World War I give outstanding evidence that women's output takes its place satisfactorily with that of men. For example, of 267 metal-working firms reporting on the substitution of more than 13,000 women for men in 14 occupations, the proportions stating that women's output was equal to or greater

than men's ranged from 56.8 percent of the firms reporting on grinding and polishing to 84.6 percent of those reporting on welding.

In another of the World War I studies reporting many women in Cleveland, Ohio, employed in plants and on processes to which they were not accustomed, the output of women and girls was found to be greater than that of men and boys by 64 percent of the production managers reporting for the metal industries and 20 percent of those reporting for the clothing industries. In a study of women employed in the metal trades, made at about the same time by the National Industrial Conference Board, two-thirds of the employers reporting on production stated that women's output was equal to or greater than that of men.

In a study of the replacement of men by women in New York State industries during World War I, made by the Department of Labor of that State, it was found that even in cases where the women produced more than the men they received lower wages than the men doing the same work in the same plant.

Output Depends Partly on Short Hours.

One of the primary requirements for maintaining output is hours so short that the worker does not become over-fatigued and thereby unable to keep up production. The fine processes and the dexterous hand work often done by women appear to be just the types of occupation that lend themselves best to the maintenance of an even production schedule throughout the day, *provided* daily and weekly hours are sufficiently short and rest periods are arranged suitably to fit the needs of the job.

There is well-established evidence, based on scientific experiments and long factory experience, and illustrated by a multitude of instances, showing that production falls if daily or weekly hours are too long. The experience of the present war repeats and augments this evidence. A recent report of the British Industrial Health Research Board states that the long hours of June and July 1940, plus the extra effort made by the workers, usually were detrimental to sustained productive effort.

Women on capstan lathes in World War I increased their output 13 percent where work hours were shortened about 13 percent.

Study of the iron and steel industry in the United States made by the Bureau of Labor Statistics considered the 10- and 12-hour day in 1922,

when production of a ton of pig iron required 3,270 man-hours. Daily hours were reduced to 8 in 1923, and in 1924 the ton of pig iron was produced in 2,662 man-hours. Thus the shortened hours caused a reduction of nearly one-fifth in man-hours required for the job. In this interval no mechanical improvement of any importance was introduced.

In comparing an 8-hour and a 10-hour metal-working plant, the United States Public Health Service found the shorter hours enabled production to be better maintained throughout the day; output could be kept up through the day best on dexterous hand work.

Records of a major electrical company over a 5-year period show that output increased, especially on repetitive monotonous work, where proper rest pauses were introduced. The increase was greater if food also could be had.

An investigation by a committee of the Federated American Engineering Societies of continuous-process industries that had changed from a 12-hour to an 8-hour day reported no technical difficulties, and a production increase of 25 percent or more in some plants in practically every major continuous-process industry, accompanied by marked decrease in absenteeism and labor turn-over.

The United States Government Printing Office, after changing to a 5-day week (40 hours) in 1932, reported that the production per worker had increased by from 4 to 10 percent.

The Employer's Adjustment to a Woman Labor Force

Employers sometimes object to the "equal pay" principle because of adjustments found to be necessary when they take on women. It is claimed that these may involve changes in plant or in order of work, added supervision, or consideration of labor laws applying to women's work.

Changes in Plant or Order of Work.

It is often true that the changes referred to are only minor and inexpensive, and in such cases they cannot be used as a reason for lower pay to women.

The division of jobs into their elements is a process that has been going on a long time. It may be hastened by this or that economic change (in the present case by the pressure for war production) but it continues regardless of the worker's sex.

Where changes in machines or in routing of work require a considerable outlay, in more cases than not these changes are

no more extensive than a progressive and far-sighted manufacturer would make in order to improve the efficiency of the plant under new conditions, especially where large numbers of workers, whether men or women, are being added.² In the end this process will represent economy through more effective plant organization. These improvements should not be at the expense of the woman worker.

Where added locker or toilet rooms or enlarged eating facilities must be provided, these are necessary in any case because of the expansion in the labor force. In the end they advance the health and efficiency of the workers and so contribute to the efficiency of the plant.

Supervision.

The additional supervision that it may be necessary to provide where women workers are newly employed is no more than would be required by any large group of new workers. It may be considered, therefore, one of the necessities required by the increased production due to the war, and not specifically because women are being hired. Field agents of the Women's Bureau report that supervisors having no experience with women workers sometimes fear difficulties that in fact never arise, and often they become most enthusiastic about their woman labor force.

A primary requirement for supervision of women is that it always should be done by persons who have no vestige of prejudice against women workers. Faulty supervision in any case retards production. The selection of supervisors should be primarily for their capacity to deal with people as well as their knowledge of the processes. It has been found that early difficulties in the supervision of a new labor force tend to disappear entirely in a few weeks as the jobs and the work program are more clearly defined and the workers become better adjusted.

Managements can save themselves much trouble in the end by consulting at the very outset those who have experience with the problems they themselves are newly facing. From the beginning the best known policies should be followed. A

²See also p. 22.

large aircraft firm claimed to have disciplinary trouble with women. Analysis showed that their placement policies and their work organization had not been sufficiently well planned in advance. Meanwhile, other such firms were employing women with marked success.

Adjustment to Labor Laws.

On the whole, the work standards required by law are such as experience has proved will best aid maximum output as well as workers' health. A statement made early in 1942 by the Navy, War, and Labor Departments called sound standards "mechanisms of efficiency."

In this connection labor laws are a distinct aid to the employer; they protect him against unknowingly employing his labor force in such a way as to decrease its value to him. Many an employer in the great industrial States has at first thought it a great hardship to comply with some labor law, but after he has so organized his work as to observe the law he has found added efficiency and has thanked the enforcing authorities.

Where the employer could not adjust his work so as to comply with labor law without interfering with urgent production needs in an emergency, he has been able in almost all cases to obtain modification suited to his immediate requirements but so controlled that it will not in the long run handicap his workers' health and efficiency.

Work Characteristics Attributed to the Woman Worker

One set of objections to the "equal pay" principle has to do with certain characteristics that have been attributed to the woman as a worker. Some employers claim that women are less desirable employees than men because of less physical strength, greater absenteeism, a shorter working life and higher labor turn-over, a proneness to accident. Excepting only the first mentioned, these largely have to do with regularity on the job.

Available data on some of these subjects are not sufficient to make possible a complete answer of "yes" or "no" to all such objections. However, it must at the outset be noted that

in their employment women have been subject to all the disadvantages of a group of workers relatively new and used largely as a fill-in or marginal labor supply.

Women as a group too often have entered the world of industry with a handicap in no wise due to lack of capacity on their part. To a large extent this can be overcome by better industrial planning, and greater regularity of work can be secured by providing more satisfactory working conditions.

Women for the most part have not had opportunity to become so well established in industry as men. For example, in the past their training often has not been specifically devoted to their new tasks and they have not even been admitted to training in certain of the more skilled and better-paid trades; their employment has been to a large extent in irregular and low-paid industries, and thus their economic status often has been such as to undermine their health.

Physical Strength.

An increasing proportion of the jobs in industry today require dexterous hand work and skilled, intelligent manipulation, rather than heavy muscular force. They can be done well by the less powerful workers. They are the types of job for which women are chiefly employed, and there is no reason for reducing the wage rate for this skilled work merely because a woman is found to have only a little over half the physical strength of a man.³ The answer to the production problem in such cases is the provision of proper conditions of work such as suitable height or adjustment of machines, adequate seating, regulation of speed so that it is not excessive for the worker's physique, satisfactory arrangement of rest pauses, and other mechanisms of good management designed to prevent excessive fatigue and maintain output.

Absenteeism.

There seems little doubt that women are absent from work because of illness somewhat more often than men. *However, the reasons for this lie to a considerable extent in industrial conditions*

³ Women also have been found doing severe muscular work in a good many cases. See Women's Bureau Special Bul. 2, pp. 2-3.

that can be improved. For example, in a major aircraft plant where conditions of work are good it is found that even under the wartime pressures absences are no more for women than men—less than 3 percent. Similarly, in a company that employs hundreds of women producing precision aircraft instruments average absenteeism recently was found to be less than 1 percent.

In somewhat the same way as an improved machine or a readjusted method of handling a work process may require considerable adaptation in spacing, arrangement of tools and materials, or other plant conditions, it is clear that certain conditions of work must be considerably better adapted to the needs of women workers if the large supply of woman labor necessary for war production is to be secured.

A survey in 1935–36 by the National Institute of Health showed that 27.7 in every 1,000 women workers 15 to 64 years old visited, compared to 22 per 1,000 men, were ill on the day of the canvass.

In 1940, the Public Health Service reports, 101 out of every 1,000 women industrial workers, but only 65 out of every 1,000 men, had an illness of 15 days or longer.

A Public Health Service report on a large public-utility company shows absences of one day or longer due to sickness and accidents averaging per year 900 for every 1,000 men and 1,820 for every 1,000 women. (This also may indicate a higher turn-over of women.)

So far as industrial injuries are concerned, these are more severe for men than for women; but the total of time lost in the year because of illness is greater per 1,000 women than per 1,000 men.

The Public Health Service report referred to above shows that in a year's time the woman worker loses an average of 10.9 days, the man an average of 7.5 days, because of illness or injury.

Records from the same public-utility company for an earlier period showed the average annual days of disability per person on the pay roll were 6.5 for men and 13.1 for women.

There is little difference between men and women workers in the number of nonindustrial injuries suffered in the year.

For the years 1935–39, the Public Health Service reports 11 cases of nonindustrial injuries in every 1,000 women industrial workers, and 13 cases in every 1,000 men.

There is a large body of experience to show how absenteeism is greatly reduced by measures that prevent excessive fatigue, such as shortened hours, rest pauses on exacting work, guarding against too great a speed-up, and so forth. Fatigue not only predisposes the worker to illness but causes greater proneness to accident, and in both these ways absenteeism is increased.

The following examples indicate that absenteeism can be reduced markedly by a shortening of work hours and by planned rest pauses. Plant facilities for a hot nutritious meal also help to alleviate fatigue and maintain health, and thus to reduce absenteeism.

In a Women's Bureau study of lost time in cotton mills, the proportion of time lost by women was twice as great in 55-hour mills as in those with a 48-hour schedule.

Reduction of hours to 8 a day markedly reduced absenteeism in plants surveyed by the Federated American Engineering Societies after World War I.

An Indiana plant that kept careful records of absenteeism showed that girls who worked long overtime were so fatigued that more hours were lost through absenteeism than were added by overtime.

Records reported for a cotton plant show a reduction in sickness after the introducing of rest periods in forenoon and afternoon.

British experience found twice as much time lost by men and women who worked long hours as by those with shorter hours. In three shell factories, after the week was shortened to 44 hours lost time from sickness was reduced. After the change men lost no time, women 3 percent of their time, though formerly both had lost about 6 percent or more.

Proneness to accident was found in a British munitions plant to be two and one-half times as frequent in a 12-hour day as in a 10-hour day. No doubt further reduction of hours would reduce accidents still more than this.

British experience in the present war has been marked by the serious problem of absenteeism, in some industries as high as 20 or 25 percent. Contributing to this condition were the excessive work hours (since shortened), the influenza epidemic reaching its peak in the winter of 1940, and the disruption of transportation and other living facilities by air raids.

In British factories where both men and women were employed, women lost on the average about twice as much

time as men. However, a major munitions firm reported that certified illness had increased for men but not for women. (Younger men were called to the armed forces, and the men remaining were older or "of low medical grade.") Where the 5-day week formerly had been the custom, Saturday absences constituted nearly half of all in the week (for both men and women).

An important cause of absenteeism among women, besides illness, is in their household duties. This is a factor that will have to be met by adjustments in industry, as long as women workers are expected also to give service to their families or to perform personal services for themselves that are not expected of working men.

In England, where need for woman labor is acute, measures taken by industry to meet this situation include arrangement of shifts so that women will have time to buy and prepare food for their families, arranging that women's leave time can be granted when their men are on leave from the armies, and the organization of some industries so as to use considerable part-time work.

A major British munitions firm has reported that absence due to illness among part-time women employees is only 1.8 percent, though it runs to 3.3 among married women who are on full-time work.

Labor Turn-over.

Women have, in the past, been thought of as presenting a greater problem of labor turn-over than men. However, in a war economy, employment of women is the solution of a serious labor-turn-over problem caused by withdrawal of men for the armed forces. There are many other instances, too, showing women comparing favorably with men in sticking to the job; in fact, some firms prefer women because of their greater attachment to home and family ties and their consequent greater likelihood of remaining in the locality at work. As in the case of absenteeism, industry can be so organized as to reduce turn-over considerably.

More and more do women expect to remain in employment throughout a normal working life. As their numbers in employment have shown a marked increase in every census

period, so they are remaining longer in the working world. Women's Bureau evidence shows that many women remain for long years in their trades, imparting a large degree of permanency to their job-holding.

Though larger proportions of working women than of working men are in the younger groups, yet the Census of 1940 showed over 40 percent of the women in the labor force to be 35 years of age or older.

An earlier survey of the Women's Bureau, including over 35,000 of the better-paid women in manufacturing in 11 States, showed that almost 18 percent of these had been in industry for 10 years or more.

A study of 45 plants in various industries during World War I showed turn-over rates considerably lower for women than for men. However, the wartime conditions influenced this—the leaving of men for the armed forces, the influx of women into industry (1917–18).

Women Support Families Too!

An excuse sometimes given for not paying women the rate for the job is that men have to support dependents. But today this often is just as true of women. Their responsibility in this respect will be increased as more and more men go into the armed forces.

For example, in 10 studies on this subject nearly 13 percent of the more than 369,000 women reported were the *sole support* of families of two or more persons. In 34 studies reporting more than 155,000 women, and including both the married and the single, practically 60 percent contributed to the support of dependents.

As far back as 1930, census data for representative industrial cities showed that more than a tenth of the employed women were entirely responsible for the support of their families. More recently, a Women's Bureau investigation in two widely diverse localities showed that women's earnings constituted the entire support of well over a third of the families of two or more persons.

One never hears the argument advanced that a young unmarried man should be paid a reduced wage because of his status, though usually he assumes less financial responsibility for the home than does his sister. In fact, the principle of the "family wage" has never existed in this country as a basis for

wage payment. Here the wage is paid for the job done and not according to number of dependents.

Government Policy Has Long Upheld the Rate for the Job

The principle of the rate for the job, regardless of the worker's sex, has been advocated officially or ordered put into effect by nearly a score of the agencies of the Federal Government over more than 40 years.

The Woman in Industry Service in the United States Department of Labor, organized in 1918, and later the Women's Bureau of the same agency, created in 1920, has upheld the principle as follows:

Wages should be established on the basis of occupation and not on the basis of sex.

The National War Labor Board has held to the "equal pay" principle. In the case of the Remington Rand typewriter company, the Board held the low rates paid women to be so unequal as to require a raise, though no other rates were ordered advanced. The Board established the principle of "equal pay" as a definite policy in two important opinions rendered in September 1942—one in the General Motors cases and the other in the Brown and Sharpe case.⁴ Both in these and in another case in the preceding month, the Board directed that an "equal pay" clause be included in the union agreement. It should be noted especially that in these cases the Board has gone further than merely to uphold the equal-pay principle in cases where women are replacing men. It holds that comparable work should be paid the same rate *regardless of replacement*. The Board warned that slight or inconsequential changes in the job do not constitute sufficient reason for a wage differential against women; and that the physical demands of the job are not the sole standard for fixing the wage.

Quite recently, the War Production Board, the Army, the Navy, and the Department of Labor advocated that: "Wage rates for women should be the same as for men, including the entrance rate." At the same time they stated that, "Sound

⁴ See p. 24 for the text as to the Board's decision on this subject.

labor standards, which over any protracted period are essential to the maintenance of production, * * * are the mechanisms of efficiency."

The Michigan legal requirement that where women do the same work as men they shall receive the same pay rate recently has been upheld in the courts. In this case, back wages were ordered restored to women who were paid only 76 cents an hour while men on similar work received 97 cents.⁵

The Fair Labor Standards Act of 1938 specifies certain basic minimum rates with no distinction by sex; in one section of the Act machinery is created to fix higher minimum rates than the basic minimum, and here is stated—"no classification shall be made under this section on the basis of age or sex."

Under the National Recovery Administration and its forerunner, the President's Reemployment Agreement, the payment of a lower wage to women than to men was held to be a practice leading to unfair competition in industry. The N. R. A. announced the policy that "Female employees performing substantially the same work as male employees shall receive the same rate of pay as male employees."

In 1915, the Commission on Industrial Relations, created by Congress to inquire "into the effect of industrial conditions on public welfare," recommended that both public opinion and legislation recognize "the principle that women should receive the same compensation as men for the same service." The much earlier Industrial Commission, created in 1898, expressed itself strongly on the principle of "equal pay for equal work."

During World War I, with the necessary rapid entry of women into war industries, the Chief of the Bureau of Ordnance of the War Department issued (November 1917), to arsenal commanders and all manufacturers filling war contracts, General Orders 13, providing among other things that:

The standards of wages hitherto prevailing for men in the process should not be lowered when women render equivalent service.

This principle was taken as a guide by the Women in Industry Department of the Woman's Committee of the U. S.

⁵ General Motors Corporation v. Read et al. (1940), 294 Mich. 558; 293 N. W. 751.

Council of National Defense. There also was a Women in Industry Committee of the Advisory Commission of the Council of National Defense, which advocated the same policy, as follows:

Whenever women are employed for work customarily done by men, they shall be paid the same rates as are paid the men. If processes are not identical, an adjustment of wages should be made according to the skill and output of the workers. But in no case shall the wage scale for any department or process be reduced for no other reason than that women are replacing men.

In its report of March 1918, the War Labor Conference Board (appointed by the Secretary of Labor on recommendation of an advisory council) recommended the creation of a National War Labor Board to handle industrial disputes, and formulated the principles to be applied, which included the following:

If it shall become necessary to employ women on work ordinarily performed by men, they must be allowed equal pay for equal work and must not be allotted tasks disproportionate to their strength.

The National War Labor Board *applied this principle in more than 50 of the cases* that came before it. The largest numbers of these had to do with work on street railways and in steel, machinery, or metal plants, but the cases also included other industries—chemical, electrical, paper, food, laundry.

This principle also was adopted by the War Labor Policies Board, of 1918, an administrative body within the Department of Labor created to correlate its work with other departments in the Government. In December 1918, the United States Railroad Administration made the following rule, restating it in slightly different terms in the General Order of May: "The pay for female employees, for the same class of work, shall be the same as that of men, and their working conditions must be healthful and fitted to their needs. The laws enacted for the government of their employment must be observed." In November 1919, the U. S. Civil Service Commission definitely ruled that all examinations were open to men and women alike.

“Equal Pay” in Union Agreements

In union negotiations, clauses now frequently include agreements to the principle of equal pay for women's work.⁶ In fact, at the National Industrial Conference called by the President after World War I, Mr. Samuel Gompers, chairman of the labor group, stated this principle as one of the “fundamental propositions” having “unanimous approval of the labor group, including the representatives of the railroad brotherhoods.” In the past, however, unions often have failed to realize how important this is in maintaining wage standards at a time when women must supply an increasing part of industrial labor. Though many instances of local contracts could be given, the following may be taken as typical.

The principle is stated in agreements both with A. F. L. and C. I. O. unions in major aircraft plants, sometimes both unions having agreements in the same plant, and both stating this principle. For example, contracts of the International Association of Machinists with two different aircraft companies state:

Company 1. Wage rates shall be the same for men and women doing comparable work.

Company 2. All terms referring to male employees in this agreement shall also be applicable to female employees. [No differential rates are set.]

Two of the contracts of the International Union of United Automobile, Aircraft and Agricultural Implement Workers of America with aircraft companies state:

Company 1. Female employees who may be required to perform the same work as male employees will receive equal pay.

Company 2. There shall be no discrimination in rates of pay for female employees replacing male employees.

On a Nation-wide scale, the United Electrical, Radio and Machine Workers of America are including such a clause in

⁶ In some cases where entrance rates for women formerly have been very far below those for men, though the contract announces the “equal pay” principle, fully equal rates cannot always be reached immediately without an interim period merely narrowing the differential. This situation need not occur where women are going into jobs new to them or new in the plant.

their agreements. Such contracts have now been made with the major electrical manufacturers and with important automobile companies. In one of these applying to all the plants of one of the largest electrical companies, men's jobs are defined as those performed by men prior to December 7, 1941, and the contract states:

Women assigned to such jobs during the war emergency shall receive keysheet rates of pay equal to those received by men under similar circumstances.

Another contract of this electrical workers' union provides:

The company agrees to abide by the principle of equal pay for equal work for female employees employed on the same operations as men.

The Amalgamated Association of Street, Electric Railway, and Motor Coach Employees has established and long maintained this principle. Recently it was upheld in a strike to keep up the wage rates for women cleaners for a major country-wide transportation company.

An agreement of the United Steelworkers of America with large subsidiaries of United States Steel contained the following:

Women employed to perform work on jobs heretofore performed by men shall receive the same pay for fully performing the same quantity and type of work.

The United Rubber Workers of America include such a clause in their contracts, for example, with plants in Pennsylvania, Ohio, and California. One such contract reads:

The company further agrees to pay equal pay for equal work and all development work having no temporary or permanent rate established shall be compensated at a rate not less than employee's past average earning for last pay period exclusive of overtime.

Another agreement for rubber workers says:

All employees shall receive equal pay for equal work, regardless of sex, color, age, or nationality, and shall not be penalized on account of machine or equipment inequalities. It is understood that in any case where female labor replaces male labor, the piece-work rate in effect on that job before the change was made shall be effective.

Some unions that formerly have not included women in their membership have now admitted them, since many more women have come into the industry. An example is the Inter-

national Association of Machinists, whose locals opened their doors to women in 1941. Many of these women were bench workers and operators of foot or power presses.

Women's Pay Rates in War Industries

Expanding aircraft manufacture is the wonderfully publicized industry of today. Most plants are new; almost uniformly excellent work conditions are planned and built into the plants and the organization. Women have been employed in large numbers for less than a year. As in World War I, the principle of equal pay for women's work appears to be especially well recognized where employment of women is relatively new.

In visits to all major aircraft plants in the country, agents of the Women's Bureau found the same pay scale for women as for men usually prevailing for workers on first entrance to aircraft plants. However, there are some exceptions; for example, in one aircraft plant where rate differentials existed all along the line a woman instructor was found receiving a pay rate far below that of the men she was training. Most aircraft assembly plants have a regular wage advancement policy for the first months of employment, after which workers are assigned according to the rate for the job. Women's work history in aircraft is short—their employment in large numbers had scarcely begun before December of 1941. Hence it is too early to be sure as to the rate of their progress into the more highly paid jobs in the industry.

In most ammunition plants, in contrast to the situation in aircraft, it was found that women have not been started at the same rates of pay as men. However, a number of plants have worked out detailed job classifications and pay the rate for the job, and a few have a system of automatic pay advancement. There are many cases in Government arsenals where women's rates are far below the standards for men in the same type of work.

In certain machine-tool plants visited by the Women's Bureau entrance rates of women were found to be well below those of men.

In shipbuilding, women were only beginning to be employed on production work in the late summer of 1942. In two major shipbuilding and drydock companies visited by the Women's Bureau, these new workers were paid the same beginning rates as men on the same processes.

The Rate for the Job

A correct or suitable rate for a job can be established only by an analysis of the specific requirements of the job.⁷ However, there is not always time or facility to undertake a really good job evaluation, and one that is not excellent is worse than none. In the meantime, even without further effort at defining the job, or the work, much can be done if there is a sincere effort on the part of management and workers to carry out the principle of equal pay for women's work or "the rate for the job." The Women's Bureau recommends the following as a workable basis of pay until a plant can complete a job analysis.

1. *If the job or operation is a new one, the rate should be fixed according to the job, and regardless of whether a man or a woman is to perform it.*
2. *If a woman is placed on a job formerly done by a man, or on a type of job customarily done by a man, she should receive the identical rate paid the man.*

Managements sometimes make slight changes for the purpose of improving the process, and such changes cannot be taken as a valid reason for paying a lower wage rate to women.⁸ Among the examples of this would be the raising or lowering of benches or machines to improve the work lay-out and reduce the lifting weight; the arrangement of work so that the heavy lifting is performed by movement or material handlers (laborers); the placing of an automatic stop on a machine; the installing of conveyors to slide parts from one machine to another; the introduction of a lighter arbor or other machine part, or the changing of a jig or fixture so as to lighten the lifting weight; and so forth.

⁷ Without such an analysis no words can define the job in a manner finally satisfactory for the fixing of rates. Words that have at some time been used in an effort to define the job have included identical, the same, similar, equal, equivalent, corresponding, essentially identical, comparable, kindred, essentially similar, substantially or appreciably the same, similar in all material respects, and so forth.

⁸ See also p. 9.

Newer Needs of Industry and Workers

Old ideas that still exist as to women's work are not fitted to the needs and possibilities of industry today. They are outmoded and are being discarded more or less rapidly.

Advanced management concentrates its will and exerts its energy to fit industrial practice to the conditions of work best suited to the needs of the workers, recognizing this as a basic factor in securing the fullest output.

The experiences being gained in war-production efforts have shown that in the future there must be closer fitting of job requirements to workers' needs, a fuller attunement of the entire organization of industry to the requirements of human beings.

Extracts from Decision of National War Labor Board in the General Motors Cases, September 1942

FROM DIRECTIVE ORDER

Wage rates for women shall be set in accordance with the principle of equal pay for comparable quantity and quality of work on comparable operations.

Any dispute arising as to the question of quality, quantity, or comparability, as herein defined, shall be subject to final determination by an arbitrator appointed by the National War Labor Board; provided, however, that any such dispute which involves an alleged violation of a local wage agreement shall be settled within the procedural framework of the grievance provision in the agreement.

The parties shall include in the new agreement the above provisions and in their application shall be guided by the Opinion of the Board in this case.

FROM OPINION OF THE BOARD

Wage Rates for Female Employees.

The National War Labor Board has accepted the general principle that wages should be paid to female employees on the principle of equal pay for equal work. It believes that there should be no discrimination between employees whose production is substantially the same on comparable jobs. This is not a new principle. It was enunciated by the War Labor Board set up in 1917 to deal with industrial problems arising during the first World War. Our country will depend in this war more and more upon its women to produce the materials with which its men will fight. In calling upon American women to play such a vital role on the industrial front, the country has an obligation to provide the utmost assurance that they will not be subject to discriminatory treatment in their compensation. Careful attention must be given to the equitable effectuation of this principle.

The Board has directed the parties to include in their new agreement a provision that wage rates for women shall be the same as for men where they do work of comparable quantity and quality in comparable occupations. The wording of this paragraph in the Directive Order indicates the impropriety of using slight or inconsequential changes in a job as a reason for setting up a wage differential against women employees. Wage-setting on such a basis is not compatible with the principle of equal pay for equal work. The Board wishes to stress, however, that the definition embodied in its Directive Order on this issue is not related solely to the physical characteristics of the operation performed. The quality and quantity of production must also be considered. Female employees assigned to an opera-

tion which has been or which is performed by men should receive the same pay when they produce the same quality and quantity of output. Any differential which results in lower pay to women under such conditions would be discriminatory. On the other hand, where lower production or performance standards must be established for women, an adjustment of wage rates is compatible with equal pay for equal work.

The Board has already, in the case involving Norma-Hoffman Bearings Corporation and the United Electrical, Radio and Machine Workers of America, CIO, and more recently in the case of the Brown and Sharpe Manufacturing Company and the International Association of Machinists, AFL, taken cognizance of the fact that it is often impossible or inadvisable for female employees to undertake heavy physical labor which has been established as a part of certain jobs when performed by men. In such cases, the employment of women workers may entail extra supervision, extra set-up men, or extra carry-off men. As pointed out in the Brown and Sharpe opinion, extra labor costs can be computed in these circumstances and can be given pro rata weight in establishing an equitable rate of pay for the female workers. Such an adjustment of rates is in line with the equal pay for equal work principle where it is necessary to prevent an increase in unit labor costs. On the other hand, such a division of work and specialization of tasks may frequently be made without increasing labor costs even though the female employees continue to receive the established rate for the operation. In such cases, there is no sound basis for setting a differential rate against the female employee. Such division of tasks has often been used on jobs manned by male employees as a means of reducing unit costs while maintaining hourly rates. There are sound reasons therefore for guarding against the use of the procedure to cut women's rates under such circumstances.

The previous discussion indicates some of the factors which must be taken into account in equitably effectuating the principle of "equal pay for equal work." This matter cannot be entirely disposed of by any clause, no matter how carefully it may be worded. The principle of equal pay for equal work must be worked out in individual situations by parties who cooperate in good faith to secure the desired objective. Even under such circumstances, there may be honest differences of opinion. It is in recognition of this fact that the Board has provided in this case that certain disputes regarding the rates established for women employees shall be treated as grievances and handled through the established grievance procedure. In the case involving the U. A. W. such cases are ultimately subject to umpire determination insofar as they may represent a question of compliance with a local wage agreement. The Board has further provided in the U. A. W. case that any dispute as respects rates for female employees which does not properly fall within the jurisdiction of the umpire, as provided in the agreement between the parties, shall be finally determined by an arbitrator appointed by the Board.

References

GENERAL DISCUSSION

Women in the Economy of the United States. Women's Bureau Bul. 155. 1937. See pp. 46-53, 58-60, 63-70, 79-81.

RECENT DATA

National War Labor Board mimeographs:

Order and Opinion in Brown and Sharpe Case, Sept. 25, 1942.

Order and Opinion in General Motors Cases, Sept. 26, 1942.

Effective Industrial Use of Women in the Defense Program. Women's Bureau Special Bul. 1, 1940. See p. 19.

Women's Employment in Aircraft Assembly, 1942. Women's Bureau Bul. 192-1. See pp. 16-17.

Women's Employment in Artillery Ammunition, 1942. Women's Bureau Bul. 192-2. See pp. 15-16.

EARLIER OR HISTORIC DATA

Employed Women Under N. R. A. Codes. Women's Bureau Bul. 130. 1935. See pp. 2, 20-25, 132, 140-142.

Wages Paid in Ohio Prior and Subsequent to Ohio Minimum Wage. Women's Bureau Bul. 145. 1936. See pp. 17-21, 22-29.

The National War Labor Board [World War I]. Bureau of Labor Statistics Bul. 287. December 1921. See pp. 1-10, 69-71.

WORK HOURS, LOST TIME, ILLNESS

Hours and Efficiency in British Industry. Max D. Kossoris, in Monthly Labor Review, June 1941.

Occupational Diseases Among Women. Women's Bureau Bul. 184. 1941. See pp. 3, 14, 27.

Hours of Work, Lost Time, and Labor Wastage. British Industrial Health Research Board. Emergency Report No. 2, 1942.

Hours of Work in Relation to Health and Efficiency. New York State Department of Labor. In Industrial Bulletin, May 1941.

JOB ANALYSIS

The Theory and Practice of Job Rating. M. F. Stigers and E. G. Reed. McGraw-Hill Book Co., 1942.

Union Participation in Job Evaluation. Harold B. Bergen. In Personnel, March 1942.