

words of the staff, and it has among its experts some of the leading chemists and other scientific and research workers who were formerly engaged either as consultants or with research work in the universities. The officials are nothing if not thorough. In one department some men, hearing that fire had broken out in the acid section, went to the spot and took particulars of the growing damage, while the fire was spreading, in order that no time would be lost in the rebuilding. It was a ludicrous sequel which followed, for these men were mistaken for enemy aliens, and they were warned off by the military guards for taking notes.

The greatest care is taken of the workers, because the toil is monotonous and very limited in outlook. But the factory is so planned as to minimize the unhealthy effects of industrial drudgery. It was the first large works to abandon Sunday labor as a regular practise.

It is eminently satisfactory to learn that there has been less labor trouble in this district during the war than probably in any other. As one of the leading employers remarked: "We watch closely the mental attitude of our men, and touch the right spot when needed. No real grievance is allowed to continue."

Another fact is that the employers are giving great concern to the industrial problems of the future, and when the time comes for re-conversion of their works to peace production they will be ready to readjust not only their plant, but their relations with those whom they employ. Meanwhile nothing is allowed to divert them from the main purpose of the hour, and, notwithstanding difficulties, and even annoyances, the manufacturers of the English Midlands and their workmen are performing a splendid service on behalf of the Allied cause.

ROMANCE OF MUNITIONS WORK.

An English correspondent has just given an account of a visit to a war establishment in the Midlands, which, in deference to the censor, must be described as "H.M.F.—." It is the first and one of the largest of His Majesty's factories for the production of high explosives, and up to the present it has manufactured more than 68,000,000 pounds of T.N.T. Its two sections cover an area of over thirty acres, which in the opening months of 1915 was very largely pasture land. By a combination of money and plans provided by the Government, and organization and skill supplied by a company who knew all about acids but nothing about T.N.T., a plant was erected, and T.N.T. was being made before the year was half gone.

Since then "H.M.F.—" has poured out a continuous stream of an article whose very name is almost unpronounceable. It is said that there was a time not very long ago when appliances were of the crudest kind for making it, and it is possible to shudder at the thought that in those days "men with watering cans poured molten T.N.T. into coffee cans, from which it was afterwards taken out and broken up with a wooden mallet to be packed and sent away." The methods and apparatus are no longer primitive, and by an elaborate fire-fighting equipment it is possible to flood every floor in a few moments. The calmness and quietness with which the girls weigh and pack the deadly product is astonishing. About 1,700 women and girls are now employed in the factory. It started with male labor only, but now more than one-half its workpeople are women, and before long three-fourths of the workers will be women. This is all the more surprising because the awful possibilities of T.N.T. might well strike terror into the heart of even the bravest man.

Only an expert chemist, we are assured, could grasp and describe the purpose and working of the huge stills, the miles of main and pipes, the tall and broad towers, and the rest of the plant. The nitric acid, first distilled and mixed with sulphuric acid, is pumped to the explosive section, three-fourths of a mile away, at the rate of several thousand tons a week, and only those with technical knowledge can realize the significance of what is being done in what is called "continuous process nitration." It must suffice for ordinary people to realize a little of the enterprise and courage to be told that the output is now three times that of a previous plant, with one-half the space and one-third the cost. It shows something of its wonderful result to know that within a few months of its erection about \$1,000,000 worth of the original plant was scrapped, as obsolete.

Efficiency and progress are the watch-