

isting economic system endures. So far as the Geological Survey Branch of the Department of Mines is concerned, it must be admitted that serious efforts are made to secure the best men, and recent practice has been that no field officer can obtain an appointment on the permanent staff unless he holds a doctor's degree from some recognized university. Possibly the same rule holds in other government technical departments, but the writer cannot speak with certainty on this point. That men with such qualifications are willing to accept the inadequate salaries offered is a reproach against themselves rather than against their employers. Past experience has shown very conclusively, however, that in consequence of its parsimonious policy, the government is unable to retain the services of many of these men for any considerable period, and most of the prominent consulting geologists and mining engineers in the country to-day, and in recent years, were formerly officers of the Geological Survey; in some cases, the services of such men have been lost to the country. Surely the work with which our technical departments is entrusted is of the very first national importance, and if it is worth doing at all, the best brains available in the country are required for its most efficient prosecution. In this respect, the policy of the government, in under-paying its technical employees, is culpable in the extreme.

Lower Wages Than Unskilled Laborers

However, it is not the government alone which holds the technical professions in such low esteem: this is, unfortunately, more or less universal. Provincial departments and municipalities have followed the lead of the federal technical departments. Corporations and companies are little better in this respect, and it would be very exceptional to find their technical advisers receiving salaries on the same scale as their law advisers, while the mass of their technically trained employees are often paid the same, or even lower, wages than their unskilled laborers. In some of the western coal mines to-day, mine managers are actually working at the face, because they can earn considerably more money using their muscles than using their brains.

This is really the crux of the whole matter. Ordinary labor, requiring little or no special training or skill, and only average intelligence, has become so highly organized throughout the world that it is in a position to enforce its demands for a fair wage; and like the doctor and the lawyer, labor displays no false modesty in estimating the value of its services. On the other hand, the technically trained man, whose knowledge has been acquired only at considerable expense, both in time and money, and who must possess a fair modicum of ability and intelligence, is at a discount, and this is entirely owing to his lack of organization, and lack of professional etiquette.

Engineers the Life Blood of Industry

This state of affairs is a very unhealthy one, and it is of the utmost seriousness, not only to members of the technical professions, but to the whole country and to the whole world. Wages have reached their present high scale partly as a result of the war, but it would be most unwise to assume that they will be materially lowered during the present generation, if ever. All experience is against this assumption. The wages or salaries of technically trained men have not advanced, or certainly they have not advanced to anything like the same extent. If conditions are to be allowed to remain on this unsatisfactory basis, the outlook for future technical and industrial progress is indeed pessimistic. What incentive is

there for parents to go to the expense of sending their sons to the technical colleges or to the universities to learn an unremunerative profession? What encouragement is there for the boys themselves to take up with diligence or keenness the arduous courses of study which are necessary before they can qualify as efficient technical men or engineers, when they realize that they can, with their hands alone, command an immediate independence and very respectable pay? There is something radically wrong with a system under which a university graduate, after four or more years of special study, is only too glad to obtain a position at a salary of \$100 or so per month, whereas a man with only one or two months' training can easily obtain work, which is almost purely manual labor, at \$5, \$10, or even more, per day. Education for its own sake is a fine ideal, but there are few men so altruistic or so affluent that they do not look upon their education as a means to an end, as an investment which will yield dividends in the shape of a future salary. Moreover, it is well that this should be so; a rapidly growing industrial nation, such as ours, has need of all the trained technical men it can obtain; they are the life blood, without which its industries must soon decline and die. Any policy or condition which tends to discourage the production of such men is suicidal to the growth of all industry, and it is becoming increasingly evident that this condition already exists.

Complete Lack of Professional Etiquette

It cannot be emphasized too often, however, that technical men are themselves mainly to blame for this condition, and that their salvation rests entirely with themselves. There is evident among them an almost complete lack of professional etiquette. A case which recently came under the writer's notice may be cited in illustration of this. A surveyor in a western town was asked by his council if he would accept a lower salary, and refused. Thereupon he was asked to resign, but was informed that he might, if he wished, send in his application for the position at the lower salary. This invitation was also declined, but the council had no difficulty in securing another man at the lower salary. It is not necessary here to go into the merits of this particular case, but scores of similar instances might be mentioned where technical men have been willing and anxious to underbid one another in the matter of fees or salary, and the present low status of these professions is the direct outcome of this procedure. This sort of thing would be impossible among men who had any regard for the dignity of their profession, or a proper sense of what was due to themselves, and it can easily be avoided by some form of organization.

Engineers Are Laborers, Not Capitalists

There seems no obvious reason why professional engineers and technical men in this country should not form a union as highly organized as any of the so-called labor unions. There is not, or should not be, any reproach or stigma attaching to the words "laborer" and "laborer." Labor is defined as "the toilsome exertion of either body or mind," and surely the men of the technical professions have as much claim to the title "laborer" as anyone. For some obscure reason, however, men of the engineering professions have been popularly classed rather with the capitalist than with the labor man, though goodness knows they number very few capitalists among their company.

Labor unions have admittedly done much to improve the condition of men working in skilled and unskilled trades, and they are likely to play an even more im-