central "councils," organized and called "industrial" strikes or entered into "industrial" agreements which promise to

provide a fairly stable and productive peace.

Engineers certainly need careful organization along both "trade" and "industrial" lines. In the labor world most workmen are in favor of one type of union or the other; I am in favor of both. It seems to me the "trade" union should be principally a mutual benefit and educational or "professional" centre, while the "industrial" union should be, for the present at least, primarily the "arm" for use when "arguing" if anyone wants to put it that way; that with the "boss," is, the "economic" union, which is the only medium with which the workers can meet the employers' "economic" unions for the purposes of "collective bargaining," which, we are told, is to solve the labor-capital problem. The co-organization of the two is no more impossible or impracticable than the crossindexing of a library; and, given the desire to do it, probably presents no more real difficulties.

## Engineers in Labor Organizations

I think every engineer should be a member of his proper engineering society, and that all the engineering societies should be closely federated into a sort of central engineering council, as has already been done to some extent. They should have the same, and no more, legal recognition and protection that labor unions may have, for what we ask for ourselves we should willingly grant to others. And every engineer should, I think, also become a respected member of whatever labor organization prevails in his industry. For instance, the members of the city engineering department should be members of whatever union formation exists among the city employees, whether it is in a straight industrial form or a "craft" form, with a central municipal industrial labor "council," upon which the "crafts" are all represented. Possibly there would be less trouble with municipal strikes if such were the case, for out of mutual understanding frequently grows agreement.

If some of us who consider ourselves "free, independent, professional engineers" would not dare join a real "trade union" or a real "industrial union" for fear of being ignominiously "fired" by the "boss," just as the office boy might be, at least we could study such organizations, form independent and scientific opinions, and acquire a sympathetic understanding of them. It is time we stopped pining to be the "Little Brother of the Rich" and aspired to be worthy

to become the "Big Brother of the Poor."

Besides, where are we to stand when this much-talked-of "democracy in industry" or "co-operation between capital and labor" is brought about, and capital sits on one side of the directors' table with labor on the other, as per the "Whitley" and some of the other even more promising schemes for securing that degree of harmony which is necessary if we are ever to have the "increased production" which the directors of the American Association of Engineers think so desirable? Are we engineers to be the only "menials" remaining in the industrial family, supplicating for crumbs from the festive board, while the bricklayers, plumbers, miners, trainmen, etc., all become principals?

## Is Owners' Interest Different?

And if the "law of supply and demand," which the directors of the American Association hold in such reverence that they expect it, unaided, to cure all the engineers' ills, should be tardy in necessitating the services of some of us en-gineers, are we to sit idly by and see our wives and children want? Are we to go out and compete for the jobs of our fellow-engineers, and thereby run down the level of our "rewards" still further; or what? The "law of supply and demand" is one of the fetishes of the times which our experience during the war should have destroyed but apparently has not. This obvious, natural law has never been handled scientifically for the benefit of the public, but has been left free to lumber around our industrial structure, hurting or helping whom it may, except when the "monopolists" have deliberately prevented it from working, to the public's injury and to their gain.

The engineer is a workman; nothing else. And I have sometimes noticed that those who think they are something different are usually the engineers who "work" the hardest for the least pay. Our natural interest, as engineers, is with those who "work" in industry, not with those who "own" industry. The most of us "own" nothing but our education and skill and native ability as engineers, and we very frequently "owe" someone for the education.

Those of us who "own" something apart from our profession, and I may include myself amongst the number, should not confuse our interests as "owners" with our interests as "working" engineers. The sooner we wake up to the fact that as a professional group we are primarily "workmen," and act accordingly, the sooner we will be able to provide our wives and children with those superior luxuries enjoyed to-day by the wives and children of bricklayers. machinists, tailors, plumbers and other "workers" who do not accept "recognition" as part payment for the services they render.

To say that some of the things "labor unions" stand for and do are wrong does not seem to me to be a valid argument against engineers having or belonging to "labor unions." What other organization is there that does not at times do things which some of us think are wrong? Certainly not the governments at Ottawa or Washington, which are unions, or rather, councils of unions, of which all of us are supposed to be members and for the actions of which each of us is at least to some extent responsible.

## "Engineers Creatures of Politicians"

If, as I maintain, we are but "labor," we should take our place with labor. Certainly no one will contend that, as engineers, we are capital any more than is our aristocratic friend, the neighborhood plumber, unless it is merely in a matter of degree. Had we not neglected to take our place with labor, we might have led the way to better understandings of industry than have prevailed and to better lines of industrial action than those which have sometimes been followed and of which we may rightly disapprove.

The human race advances slowly; and, apparently, seldom until its stomach prompts the march. Probably the H. C. of L. will do for us engineers what nothing else ever has: Set us moving together in our own interests, which, in the end, I believe, will be very greatly for the benefit of

There was never a time in the world's history when the services of good, conscientious engineers were more necessary. If we could but apply to the "politics" governing our engineering projects, that trained, straight thinking which we now apply to the "brick and mortar" part of those problems, I think there would soon be a happier and a better world for us all to live in.

To-day we are too frequently but the creatures of "politicians" and "profiteers," doing their bidding, or at any rate practising our professions very largely by their leave. The order should be reversed. But there is no one going to do this reversing for us; we must do it ourselves. "In union there is strength."

CHARLES A. MULLEN, Director of Paving Dept., Milton Hersey Co., Ltd. Montreal, Que., January 3rd, 1920.

## POWER DEVELOPMENT AT ST. RAPHAEL, QUE.

NONTRACTS were recently signed by Maurice Rousseau. president of the Montmagny Power Corporation, to supply 3,450 h.p. for the rolling mill and shops of La Machine Agricole Nationale, Limitee, of Montmagny (formerly the General Car & Machinery Co., Ltd.).

The development will be on Rivière du Sud at St. Raphael, in Bellechasse county, about 16 miles from Montmagny. Gauvin & Lessard, consulting engineers, Quebec, are revising plans, and contracts will soon be let for transmission line, penstock, water wheels, generators and concrete dam. The new plant must be in operation by January 1st, 1921.