

BRIEFER COMMUNICATIONS.

CONSUMER'S SURPLUS.

Without entering into controversy, I would like to say briefly that Professor Patten, in his able paper in the last number of the *ANNALS* on "Cost and Utility," has misconceived what I mean by the term "Consumer's Surplus." He says (p. 30):

"The two methods of measuring utility can be illustrated by comparing Professor Marshall's view of consumer's surplus with mine. He takes as the utility of the first increment of a good what a consumer would give if he possessed only one increment; the utility of the second increment is what the consumer would give for it if he had but two increments, and so on. In this way he gets the consumer's surplus of each article.

"Suppose I am in a desert with three loaves of bread. To the first I might attribute 200 units of pleasure, as it would keep me alive; to the second say 50 units, as it would make me comfortable; to the third, say 5 units. If instead of bread I had three pounds of meat, I might attribute to the first pound 300 units of pleasure; to the second 75 units; and to the third, say 10 units. If, as a third hypothesis, I had both articles to the amount named, could I add the two surpluses (255-385) and say I had 640 units of pleasure? Certainly not."

This is not perfectly explicit; but I can understand it only as meaning that he would expect me to add them together in such a case. And indeed he continues a little later on:

"Professor Marshall's consumer's surplus would be much larger than mine, because he estimates the surplus not from a given situation of the consumer, but from a series of situations representing different stages of supply. It seems to

[618]

me misleading to add together the surplus under a variety of abnormal situations and call the sum the consumer's surplus, because it implies that the given surplus is really obtained by the consumer. This is not true, as no consumer can be in all these situations at the same time, nor do any number of consumers find themselves in the variety of situations which would make the consumer's surplus from the whole commodity correspond to the supposition which Professor Marshall makes."

If I have interpreted him rightly, he has interpreted me wrongly. For my demand schedule—from which my consumers' rent or surplus is derived—represents the prices at which various quantities of a commodity (say bread) can find a market. In the case of any individual purchaser these prices represent marginal utilities of successive elements. But in every case, all other things are supposed to remain unchanged; and particular stress is laid on the fact that there is no change in the conditions of supply of any other commodity (say meat), which is a "rival" to it (the bread), and can partially satisfy the same needs.

For instance, on p. 157,* immediately after formulating the "Law of Demand," I write:

"It must be remembered that the demand schedule gives the prices at which various quantities of a thing can be sold in a market during a given time and under given conditions. If the conditions vary in any respect, the figures of the schedule will probably require to be changed; and this has constantly to be done when the desire for anything is materially altered by a variation of custom, or by a cheapening of the supply of a rival commodity, or by the invention of a new one. For instance, the demand schedule for tea is drawn out on the assumption that the price of coffee is known; but a failure of the coffee harvest would raise the prices throughout the demand schedule for tea; and again, the demand for gas is liable to be reduced by an improvement in electric lighting. . . . The question where the lines of division

* Second edition. Nearly the same words occur on p. 160 of the first edition.

between different commodities should be drawn must be settled by the convenience of the particular question under discussion. For some purposes it may be best to regard Chinese and Indian teas, or even Souchong and Pekoe teas, as different commodities, and to have a separate demand schedule for each of them. While for other purposes it may be best to group together commodities as distinct as beef and mutton, or even as tea and coffee, and to have a single schedule to represent the demand for the two combined ; but in such a case, of course, some convention must be made as to the number of ounces of tea which are taken as equivalent to a pound of coffee." See also pp. 438-9 (in both editions). But the passage which most closely follows the lines of Professor Patten's remarks is in a note in the Appendix, p. 753,* referring to the passage in the text which contains my definition of consumer's surplus, it runs :

"If, however, an amount b of the commodity is necessary for existence [the utility of the first element] a will be infinite, or at least indefinitely great, for values of x less than b . We must therefore take life for granted, and estimate separately the total utility of that part of the supply of the commodity which is in excess of absolute necessities. . . . If there are several commodities which will satisfy the same imperative want, as *e. g.* water and milk, either of which will quench thirst, we shall find that, under the ordinary conditions of life, no great error is introduced by adopting the simple plan of assuming that the necessary supply comes exclusively from that one which is cheapest."

This last passage seems almost to anticipate Professor Patten's problem about bread and meat, and to state clearly how I would treat it. I will, however, confess that my account of consumer's surplus would be improved by fuller explanation, even at the expense of some repetition. As it stands, it has misled other people besides Professor Patten, though not, so far as I know, exactly in the same way.

* P. 740 of the first edition.

Perhaps I may be allowed to end with an Englishman's expression of admiration, tinged perhaps a little with envy, at the generous opportunities which the rapidly growing number of American universities is offering for advanced economic study, and at the zeal and ability with which these opportunities are being turned to account.

ALFRED MARSHALL.

Cambridge, England.

COMPULSORY VOTING.

A paper on this subject appears in the fourth number of the first volume of the ANNALS over the signature of F. W. Holls, calling attention, in an interesting and forcible manner, to a defect in our political system which may in time, if not remedied, prove destructive of our scheme of government. That defect consists in the lack of interest felt by a large and increasing proportion of our best citizens in the selection of our rulers.

It is not to be denied that very many of those best qualified to judge of the fitness of a candidate for the office for which he is proposed utterly neglect to take part in the nominations and elections, leaving those important and sacred duties to the leaders of political parties and their tools, men whom they can cajole or bribe to do their bidding. The business of governing thus falls into the hands of corrupt leaders and ignorant followers. It is not giving our form of government a fair trial when the most competent of our citizens neglect or refuse to do their part in providing for the public welfare.

The evil is quite obvious, as well as its disastrous consequences unless averted. But it is not easy to find a competent remedy. Mr. Holls and others whom he quotes propose to make the neglect of voting a misdemeanor punishable by fine and, possibly, imprisonment. This is of very doubtful expediency. Criminal laws have never shown themselves to be very efficacious in procuring the performance of moral and

[621]

social duties, and there is no reason to suppose they would be more potent in enforcing political ones.

The law against public drunkenness is almost a dead letter. The same may be said of the laws against profane swearing and Sabbath-breaking. In fact criminal laws are only intended to whip in the one per cent., or less, of the community who are not amenable to the higher court of public opinion and the still higher court of conscience. The function of criminal law is to punish glaring improprieties of conduct, such as the almost universal common sense of the community will not only condemn but desire to punish.

If a fourth of our citizens were thieves there could be no preventing larceny by means of criminal law. The reason is obvious. The laws depend for their enforcement on courts and juries. No man can be convicted except by the judgment of his peers, that is to say, by the verdict of a jury of the county where the offence was committed, and the finding of the jury must be unanimous. Juries are composed of the average adult male citizens, unless they are made worse than the average by corrupt means. If one-fourth of the citizens are opposed to punishing the crime, as they would be if addicted to it themselves, then the chance of getting a jury of twelve men in any particular case unanimous in favor of punishing the offence, by selecting indiscriminately out of such average citizens, would be very small indeed.

Take the case in question, the enforcement of political duties by criminal laws. More than one-fourth of our adult male citizens habitually neglect both the primaries and the elections. By the doctrine of chances there would be, therefore, more than three men on every jury called, who would be opposed to the enforcement of the law, and as one in twelve is sufficient to prevent the finding of a verdict of guilty, it is plain that convictions would be very rare indeed.

There is, however, a mode by which, it is submitted, most of our delinquent citizens could be induced to perform their political duties. That mode is to abate the taxes by, say, five or ten per cent., of every man who could show that he

[622]

had attended the primary meetings of his political party and the elections, for the current year, and voted for some candidate or set of candidates. This would be an indirect punishment of those who did not so qualify themselves for the abatement, and it would not require the intervention of a jury to inflict it.

As a punishment it would bear heaviest on the wealthy, and that in proportion to their wealth. This would be right, because it will be found to be the wealthy who habitually neglect their political duties: some from a dislike to mingle with their humbler fellow-citizens, others because they are engrossed in their schemes for amassing wealth and have no time for the performance of the mere vulgar duty of "running" the government.

It should be made the duty of the officers of the primaries and of the elections to give to every man who asks it, at the time of voting, a certificate that he did attend and did vote; and this certificate should be made the only and the sufficient evidence for the collector of taxes to act upon in abating the tax. The collector should receive the certificate as that much tax and should return it to the officer to whom he accounts, marked with the amount of tax it represents, and it should be preserved for future reference.

This would be rather in the nature of payment for the performance of the duty than as punishment for neglecting it, just as we pay jurors for the performance of their public duties, and as such it is obvious that no excuse should be received for the non-performance. It may be urged that this would be hard upon those who are prevented by absence or sickness from attending the primaries and elections; but it is no more hard than it is on the juror to deny him his pay when prevented from attending court by similar reasons. Considered simply as a payment for the performance of duty it is the citizen's misfortune if he is prevented by unavoidable cause from doing the work. To accept an excuse for not acting would open the door to innumerable frauds and would impose much labor and risk of mistake on the tax

collector. The question for the collector should be simply, Did the citizen do the work? and this would be settled by the certificate.

It may be objected that women, minors, non-residents and corporations would be unfairly affected by such a measure, and this is a serious consideration. But in all these cases the services are simply not performed and therefore should not be paid for. Let us consider each of these cases in order. The tendency of the age is rapidly remedying the case of women. Before very long all who are bound by the laws will have an equal voice in making them, without regard to sex. Until that time comes it is surely no greater hardship upon a woman to deny her payment for services which we will not let her perform than it is to submit her to the operation of laws she has no voice in making. And the State that governs her without her consent may well refuse to pay her for services she does not perform.

The same argument will apply to minors, with this difference in their favor, that a few years in each case will remedy the difficulty. As to non-residents, we must remember that it is only the land of these that is taxed and, taking into consideration the evils of "absenteeism," the State may well be allowed to discriminate somewhat against absent land-owners. Beside this, they do not perform the services and therefore should not receive the pay. This latter argument applies with full force to corporations. In addition to this it may be said that the taxation of corporations is done by the State by peculiar laws not adapted to the citizen.

The plan proposed, having some features of compulsion, may, at first, secure the performance of the duties in a careless, perfunctory manner, and therefore may at first have little good effect. But in time the voter who begins by voting merely to save his money will soon find himself acquiring an interest in the business apart from that feature of it, and will gradually come to act from the higher motive of serving his country.

To conclude, a very little reflection will show us that some means must be resorted to to compel or induce our most competent citizens to perform their political duties. A very little knowledge of the operation of criminal law will satisfy us that that is not the adequate means. We must abandon the idea of punishing where the cause of complaint is against so large a portion of the community. The mode proposed in this article may not be the best one, but at least it is capable of being carried out, while criminal law in this respect would not be.

JOHN M. BROOMALL.

Media, Pa.