## By the Way

IMET the Editor and he discoursed on editorial worries. He speaks of lack of articles for the Clarion; of the unsatisfactory rate at which subscriptions were coming in; of carking care over the state of finance invading even his leisure, militating against systematic reading and study and threatening to dry up the well-springs of inspiration; he spoke of the decadence of the prosletysing spirit in the movement; of-oh, besides these I re port to the reader, he spoke of many things.

I did my best to cheer him, lending him a sympathetic ear. I. have since been speculating whether Clarion readers could esteem this journal as an institution and they by way of beng a corporate body organized around it, because it expresses and gives effect to our desire for that kind of working class education which has for its end the liberation of society from the capitalist system. "The Clarion brings scientific knowledge and the scientific attitude of mind to the study of society and its affairs. Thus its readers may know the present as it really is: may see events and conditions clear of the distort ing influence of nationalistic biases, or the inher ited prejudices of ignorance and of privileged rul ing class interests. As an organ of scientific socialism it is the additional function of the Clarion, besides giving an understanding of the present, to criticise that present from the standpoint of the socialist program. Because an organ functioning in that way is a necessity and because the Clarion performs that function so well under the circumstances, we, its readers, as a corporate body, should guard against falling into the category of "corporations without a soul" whose membership, accord ing to the principles of "business as usual," look to receive more than they give. Causes, especially causes in the minority stage of development, reverse that principle; they demand from and impose sacrifices on all loyal spirits.

Those who, for one reason or another are only able to do but little in our common cause and, because of the smallness of their contribution lose courage and think the effort not worth while, should emulate the tenacious Scotch who have a characterrevealing saying, that "many mickles mak' a muckle." So I, who would like to write an article but can not rise to the effort, am scribbling these notes-doing my little bit.

We need more writers for the Clarion. Its present contributors are all workers who have little spare time and often the movement also makes other demands upon them. To write an article for the Clarion requires much reading and study, sometimes very much more than appears in the article and, in the interests of a still better output its contributors should not be called upon so often. More hands on deck then! Those who hang back because they have no grammar should let that be the least of their troubles; the subject-matter is the thing. I, myself, knowing no more of grammar than a wooden god, have had articles accepted. Let the aim be to bring to the working masses the most revolutionary things in existence-the socialist philosophy, science and the habit of scientific thinking. Therefore, read and study, keep up to date with the world of science. In the last three hundred years modern science has accumulated a vast fund of knowledge both on the nature of man and on that of his environment, natural and social, but it can not be utilized, in so far as the social problem is concerned, until men think on the problem scientifically. We have first, says Henry Harvey Robinson in his Tately published work, "The Mind in the Making," which I recommend for reading,-"We have first to create an unprecedented attitude of $\min$ (the scientific attitude) to cope with unprecedented conditions and to utilize unprecedented knowledge.'

The more I read of the latest scientific output, particularly that treating on the nature of man, the more I feel myself breaking atway from the intellectual preconceptions of past times. To my surprise and delight, though I am getting on in years, I find myself becoming more and more revolutionary. I distrust the "findings" of the past and hate with a fanatic hatred dogmas that cramp a free intelligence in dealing with the facts of the present; mine the evolutionist's philosophy, that the one unchanging law is the law of change. More than three hundred years ago, one of the great figures of the 16th century renaissance (the birth of the new learning) was that of Francis Bacon. He might be said to be the father of modern science, a pioneer who, as protagonist of its method, insisted upon observation, investigation and experiment as the way of knowledge Referring to those who think that of knowledge. Referring to those who think that the world will reject the sceptical attitude of science and return to the pre-renaissance ways of think-ing-the reliance on supposed universal and eternal principles and faith in divine revelation-George Santayana says, "Far from the 16th century renaissance being over and done with, on the contrary, it is just getting into its stride.,

The thought of the middle ages turned from commonplace realities to live in a world of abstractions. Experimentors and inventors were suspect as practitioners of the black art; curiosity as to natural processes was esteemed a mark of impiety, as prying into the secret ways of God. To try to introduce new ways of doing things, or to advocate changes in the established order, was to interfere with what God had ordained-the feudal lord in his castle, the serf in his hovel, God made them high and lowly and ordered their estate. It seemed that social evils were a necessity in God's scheme as fires of purification for the souls of men. To every God-fearing man, this life on earth was but a brief pilgrimage to his real home in heaven, so it was well to mortify the flesh that the soul might be saved. While the thought of the middle ages was dominated by the theological concepts of the Christian Church, the thought of the renaissance was essentially pagan. The latter exhibited a love for the world and a delight in the refinements of the flesh. Men's minds turned from heavenly to earthly visions, because the earth had become in the 16th century an intensely interesting place. The stale, stagnant atmosphere of feudal society was drifting away before the freshening winds of social change. Daring navigators had ventured over the wastes of ocean to the fabulously wealthy and populous orient and to the Americas where a virgin continent of fered a new and experimental future for mankind, where what was good in human experience might be established and the bad left behind on old Europe's shores. Trade and commerce between countries was on the increase; seaports and commercial and industrial towns and cities were growing in importance and wealth. On top of this material progress, the arts and sciences flourished, science itself being utilized in further prospering industry and commerce, while the arts brought refinements into the lives of the wealthier classes. So the 16th century renaissance marked the dawning of a new era of material and intellectual progress whose end is not yet.

I like to think of the Socialist movement as in the broad current of the renaissance tradition; and of working class emancipation as one of its fulfilments. And I concieve of Marx principally as a restless, untiring investigator, a breaker of social idols, a radical innovator, greedily seizing on the latest in the science of his day, on Darwin's intellectual output and on Lewis H. Morgan's: I see him in the great and glorious army of light marching with Bacon of Verulam. Come then, let us fall in with them.

Come then, 0 Pioneers! Every one to his bent. Reseue the Editor from the Slough of Despond. Remember, though only one man, besides being editorial writer, preparer of Clarion material for the press, proof reader, overseer of printing and dispatcher, he is also Party Secretary, correspondence Secretary, Financial Secretary, Party literature agent, father confessor and indispensable factotum for Party members and for Clarion readers resident in all four quarters of the globe. Yet it is not work, but care that kills. Writers, get busy and let an increased circulation and the Clarion paying its way be the objective of every reader. H. G. Wells, British author, publicist, and now I suppose we must call him historian also, says that civilization has reached a pass where it is a race between education and catastrophe. Haste!

## ON A PIECE OF CHALK

## A Lecture to Working Men

## By Thomas Herry Huxley

IF a well were to be sunk at our feet in the midst of the city of Norwich, the diggers would very soon find themselves at work in that white substance almost too soft to be called rock, with which we are all familiar as "chalk."
Not only here, but over the whole country of Norfclk, the well-sinker might carry his shaft down many hundred feet without coming to the end of the chalk; and on the sea-coast, where the waves have pared away the face of the land which breasts them, the scarped faces of the high cliffs are often wholly formed of the same material. Northward the chalk may be followed as far as Yorkshire; on the south coast it appears abruptly in the pieturesque western bays of Dorset, and breaks into the Needles of the Isle of Wight; while on the shores of Kent it supplies that long line of white cliffs to which England owes her name of Albion.

Were the thin soil which covers it all washec away, a curved band of white chalk, here broader and there narrower, might be followed diagonally across England from Lulworth in Dorset to Flamborough Head in Yorkshire-a distance of over 280 miles as the crow flies.

From this band to the North Sea, on the east, and the Channel, on the south, the chalk is largely hidden by other deposits; but, except in the Weald of Kent and Sussex, it enters into the very foundation of all the southeastern counties.

Attaining, as it does in some places, a thickness of more than a thousand feet, the English chalk must be admitted to be a mass of considerable mag. nitude. Nevertheless, it covers but an insignificant portion of the whole area cccupied by the chalk formation of the globe, which has precisely the same general characters as ours, and is found in detached patches, some less and others more extensive than the English.

Chalk occurs in northwest Ireland; it stretches over a large part of France,-the chalk which underlies Paris being, in fact, a continuation of that of the London basin; it runs through Denmark and Central Europe, and extends southward to North Africa; while eastward, it appears in the Crimea and in Syria, and may be traced as far as the shores of the Sea of Aral, in Central Asia.

If all the points at which true chalk occurs were circumscribed, they would lie within an irregular oval about 3,000 miles in long diameter; the area of which weuld be as great as that of Europe, and would many times exceed that of the largest existing inland sea-the Mediterranean.

Thus the chalk is no unimportant element in the masonry of the earth's crust, and it impresses a peculiar stamp, carying with the conditions to which it is exposed, on the scenery of the distriets in which it occurs. The undulating downs and rounded coombs, covered with sweet-grassed turf, of our inland chalk country have a peacefully domestic and mutton-suggesting prettiness, but can hardly be called either grand or beautiful. But on our southern coasts, the wall-sided cliffs, many hundred feet high, with vast needles and pinnacles standing out in the

