

as to allow them full sway the desired flavor will be developed and no trouble will arise. But it often happens that in spite of all precaution on the part of the cheese maker the cheese will be bitter, or black or spotted. The reason is, that owing to the milk having been kept under improper conditions it has become contaminated with bacteria, which produce some abnormal form of ripening and are in sufficient numbers to overcome the influence of the normal ferments. Here again by careful attention to the milk they may be practically kept out. A few however will always get in and if the cheese be kept in a warm, moist place there is great likelihood of their increasing here and causing trouble.

Following these facts very closely comes the subject of artificial ferments. We have noticed that all imported phenomena, except the rennet ferment, occurring in milk or connected with the manufacture of butter or cheese, and the various qualities of these are due directly to the influence of certain classes of bacteria. We also notice that many of these classes have been isolated and artificially developed and that when injected into the milk will produce their characteristic effects. Thus the ferments giving rise to the aroma of butter when injected into cream previously sterilized produced butter of an excellent flavor. The species causing bitter cheese have also been isolated, and when artificially added to pure milk gave rise to a very bitter cheese, while cheese made from the same milk without such inoculation was perfectly good. Seeing that a great many other species have also been isolated and studied it is not at all unreasonable to expect that the time is not so very far ahead when the dairyman will be able to purchase any desired ferment and use it, somewhat on the same principle as the "starter" is used to-day to ripen the cream or as brewer uses his yeast. Even at present, in some parts, ferments causing rapid ripening of the milk or proper flavor of the butter are on the market and are used with considerable success, and we are not too sanguine if we expect that before many years the butter and cheese makers will not only use artificial ferments with which to flavor their produce but will also have a variety of flavors from which to select.

Looking Backward.

UNLIKE the famous Bellamy I do not propose projecting myself into the dim and hazy future, and from that vantage ground surveying present times and seasons. To most of us ordinary mortals, past and present prove sufficiently large; we feel no over-mastering desire or yearning to encroach upon the boundless unknown before us.

Anticipation versus realization has for ages past proved a fruitful subject to the profound philosophers of village debating clubs. Despite their nightly arguments, pro and con, we, of this age, still hesitate before expressing our decision. Of one thing we are all sure, that in the past we have had joys and pleasures which we do not hope to have surpassed in the days and years to come. Friendships have been formed, ties have been woven, which bind us heart to heart, and soul to soul, with the kindred spirits we have met. And is it not well that it is so, for did we lack those friendships and those ties would

life be to us the full and joyous thing which it is? No, never; a thousand times no.

But in taking our backward glance, comparing "now" and "then," we labor under the great disadvantage of comparing widely remote objects, surrounded as they are by different lights and shadows. We too often forget to act in the living present, choosing rather to dwell upon the glories of the dead past. Could we see the two with the same range of vision, how much brighter the lives of many of us would become. Our dead Laureate seemed to realize the full force of this thought when he wrote:-

"And is it that the haze of grief
Makes former gladness loom so great?
The lowness of the present state,
That sets the past in sweet relief?
Or that the past will always win
A glory from its being far;
And orb into the perfect star
We saw not when we moved therein?"

I do not know whether "the class of '94" yet fully realize the "lowness" of their present state or not; but I do know that for most of its members life must now wear a different aspect. Even if in those days gone by we failed to catch a glimpse of "the perfect star" which the men of preceding years could see in the zenith of its splendor, no one of our number would object to have one or two of those old days to live over again. True we had our trials and our tribulations (every senior may expect them), but, after all, they were few in number: of our year it may be truly said that its latter end was peace. Here is where the trouble begins to enter; after our separation in the orthodox way, so many new responsibilities and cares devolve upon us that gradually and almost unconsciously to ourselves the bonds of union among us begin to weaken. And so, as is already the case with those gone before, it is decreed that we shall drift further and further apart in life's current until finally we may lose sight of each other. But should such an untoward fate befall us we still feel that we are mutually better for having met. One profited by another's mistakes: the successes of one led to friendly emulation on the part of another.

And so, old friends of '94, occasionally take a look backward. It will not hurt you; it will do you good. View our past failures and successes; be warned by the former and take courage from the latter; then press on in your chosen work. But never let business cares so master you that you cannot afford a backward glance and a passing thought to "Auld Lang Syne."

J. J. F.

DEATH OF PROF. PANTON'S MOTHER.

Agnes Welkie, relict of the late James Panton, passed to her long home at the age of 84, on Saturday, 10th inst. Deceased was the mother of Prof. Panton, O. A. C., Rev. J. Panton, Stratford, and Miss J. H. R. Panton, Science teacher at the Oshawa High School. She was a life long member of the Presbyterian Church at Oshawa, and was beloved by a large circle of friends. We extend to the bereaved our sincere sympathy.