

magnificent affair, and it ought to be, for it cost a million dollars. The interior is too gorgeous for words, but not for German taste. I think there is enough gold decoration on the ceiling of the concert hall to support the entire German army. One can get anything desired in the Kurhaus—from a sausage to classical music. There are sumptuously-decorated conversation-rooms, and large, splendidly-lighted reading-rooms, where one can read newspapers from all parts of creation except Canada. But there is a good supply of English newspapers containing more or less news from Canada.

There is one particular room in the Kurhaus which is very popular with old gentlemen. It is the chess-room. At all hours of the day it is full of gray beards so absorbed in chess problems they are oblivious to all else. Chess seems to be a fine game for elderly, inactive people, with a fondness for chairs. Twice a day fine orchestral concerts are given in the Kurhaus. The audience is the most bald-headed one I ever saw. Looking down from the gallery, it fairly glistens, there are so many shiny pates. Those that are not bald seem to be gray. It is a very quiet, sedate, well-behaved audience. Sometimes an old gentleman goes to sleep and causes a ripple of excitement in his immediate vicinity, but as long as he does not snore it is all right. Disturbing noises are "verboten." One afternoon a gentleman who was sitting up near the platform had a sneezing fit. He made such peculiar noises that he upset the gravity of the orchestral players to such an extent that they became completely demoralized. The conductor was furious. He stopped the orchestra, and turned towards the audience in a blaze of wrath. Fixing his eyes on the unfortunate gentleman with the objectionable sneeze, he reprimanded him very severely for breaking the Kurhaus rules.

Of course, the ancient Romans have been in Wiesbaden. Where haven't they been? Away back in 300 A. D., Wiesbaden was one of their important forts. Relics of old Roman conduits and baths have been dug up near the Kochbrunner, and there is an interesting bit of the old fortress wall still standing on the side of the Heidenberg. This wall is called the Heidenmauer (Heathen Wall). On the top of this hill is an ancient burial-ground in which are some mouldy Roman tombstones.

I met a queer old lady there one day. She was sitting on a bench absorbed in her Baedeker. As I sat down on the other end of the bench, she lifted her eyes and peered at me over the top of her gold-rimmed spectacles.

"American?" she inquired, in a woolly Western accent.

I nodded.

"Thought so from the clothes."

I was wearing a Mupich suit, but I did not tell her so.

"Interestin' place this," she went on. "Beats everything what gad-about-them old Romans was. They seem to have been every place, especially every wet place."

Experiment Work at the Central Experiment Farm.

A paper given at the Horticultural Convention, Toronto, by F. E. Buck, C. E. F.

Never before in the history of the world was there a period when such a vast volume of labor was performed, such years of careful and oftentimes laborious thought given, or such huge sums of money spent as are to-day performed, given and spent for what is termed Experimental Work. Every branch of human effort has its experimental section.

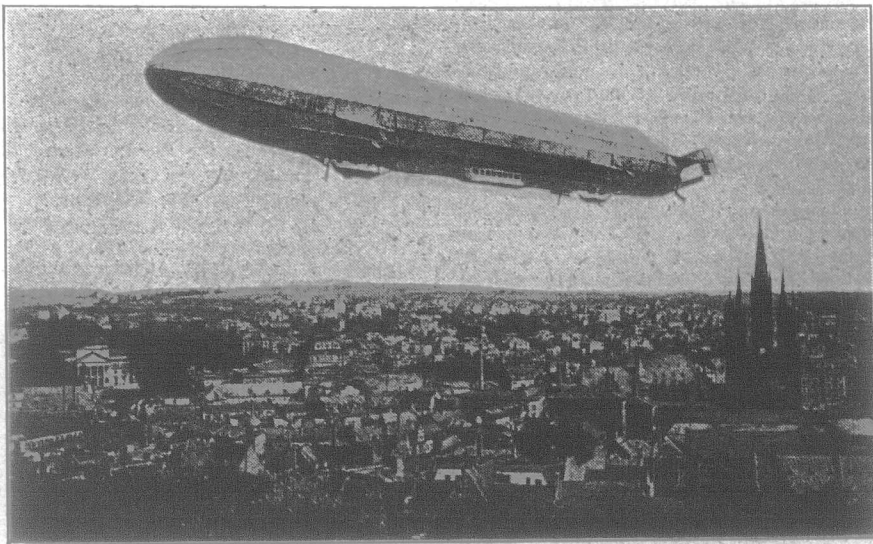
That ninety-five per cent. of nearly all such experimental work is negative in its results, or looked at in another way, is time, money and labor lost, and yet does not deter the human race in its effort to better its position and the things which make life more livable, is eloquent testimony to the indomitable courage and perseverance of the human spirit. It is not being too confident to affirm the five per cent. of successes in this experimental work of the last one or two hundred years has carried the world a larger step forward than that which it took during the previous two thousand years.

Now, while this great loss in experi-

mental work, due in some cases to negative results and in others to immature results which have to give place to more reliable results, as is the case to-day with the modern science of aeronautics—while this loss is to be regretted it is soon forgotten or honorably acquitted in the light of the small percentage of magnificent triumphs.

At Ottawa where the chief farm exists, which is the central one of the system of experimental farms, the like of which for rapid growth and perhaps efficiency is perhaps not paralleled in any country of the world, our work is of such a character and such kindly interest is taken in it by all sections of the Canadian people, that we are required to tell you, at the present stage of agricultural development, (through

also Curator of the Botanic Garden or Arboretum. In a young country like Canada work of this character undertaken by the Federal Government on such a scale had an outstanding value. In the first place it allowed reliable information to be issued in the form of semi-popular bulletins, such as those of "Hardy Trees and Shrubs," and "Herbaceous Perennials tested at Ottawa," very large editions of both these bulletins being now nearly exhausted; and in the second place the judicious distribution of such plants to the branch farms, public and other institutions where they attracted the attention of the public, has meant that for some years past, and at the present more than ever before the possibility of beautifying the individual home and



Zeppelin Airship Passing Over Wiesbaden.

our reports and bulletins), the results of all the one hundred per cent. of work undertaken, that is, the big percentage of negative as well as the small percentage of successful work. It is of course true, and we may have occasion to see why before we close, that the results of our work at the Central Farm and the branch farms show a better balance than that of typical experimental work indicated in the general statement. But the point here is, first, we should be more than satisfied if we can garner from experimental work a fair percentage of such successes as more than repay for all spent time, money and labor; and second, I wish if possible to use the remainder of this short paper in considering the successes of our work rather than consider it too much in its bulk form.

Work With Trees and Shrubs.—At the very beginning of the experimental farms system in Canada, the work of testing, recommending and in some cases distributing hardy and desirable ornamental trees, shrubs and flowers was undertaken on a fairly extensive scale. The work was under the direct supervision of the late Director and the present Dominion Horticulturist who was at that time

making it a beauty spot has appealed to a large number of people who otherwise to-day might have homes as unattractive as those of many districts of the old world or the desolate homes of new settlers in our own land.

Countless shrubs have been tested and discarded. Others have proved of great value, and the good results rewarding the efforts put into this line of work make it stand out surely as of large importance in encouraging the strivings after those things which develop the moral and ethical phases of our life.

This work is still going forward. Just now, to mention but one of its phases we have under observation a number of new shrubs and varieties of well-known shrubs which were introduced a few years ago from China and other countries by E. H. Wilson, of the U. S. Department of Agriculture, as well as other shrubs both donated and purchased. We are also putting shrubs to the test with regard to their suitability for certain purposes around the home, a phase of work rather new with us.

In this same regard the test of plants for hedge purposes is being expanded and kept up-to-date. Nowhere in the world, as far as I am aware, is there

such a complete and thorough test of plants suitable for hedge purposes, as that which may be seen under way at Ottawa. About one hundred different varieties of trees and shrubs are used. Many of the hedges are over twenty years old, while others are only one or two. Most are in fine condition, and many are very handsome and attractive. Visitors from all parts of the world compliment the farm on this collection, and enquiries are very numerous about plants for this purpose. A bulletin on the experiment will be published before long.

If I might mention a fact or two which we have discovered and which seem to interest visitors to our farm when such are pointed out to them, I should like to do so.

The following trees make almost perfect hedges:

All of the hardy birches, namely: lutea, populifolia, nigra, and lenta.

The Larches both the American and European.

And several other trees; while some trees that might be expected to do better when grown for hedge purposes are not successful, of these the elm, the Manitoba maple and the Russian Mulberry are examples.

It is always a source of disappointment to attempt growing any plant with the dual-purpose in mind of a floral effect and a good hedge, because in pruning a plant to keep it to a hedge form the flower buds have to be sacrificed, consequently several of the most handsome shrubs make poor hedge plants. However, if a hedge with a distinctive character is required, any one of the following might be used:

Purple-leaved barberry, golden nine-bark, red-leaved rose, cut-leaved alder, red-twigged dogwood, American beech, and the following evergreens: Douglas' golden arbor-vitae, silver-tipped arbor-vitae, Irish juniper, and Swiss stone pine.

Ordinarily we score a plant as perfect for hedge purposes when it measures up to the following requirements:

It must grow vigorously but not too rapidly, otherwise it will require too much pruning.

It must have an attractive appearance throughout most of the year, and must regain that appearance quickly after pruning.

It must permit being pruned to a symmetrical form and a form which will not hold the snow on the top in the winter.

It must fill out well at the base when planted in single rows, at 18 inches apart in the row.

It must not winter-kill in places, and must not suffer from attacks of insects or fungus diseases.

These are the main points of a good hedge, and at Ottawa we have many which meet all these requirements.

Work With Perennial Flowers.—A few words only on perennial flowers. Mr. Macoun's bulletin on "Herbaceous Perennials," published in 1908, shows at a glance the immense number of these



Trial hedges at the Central Experimental Farm, Ottawa. On the left, from the figure of the man to the foreground, is a hedge of Yellow Birch. Both these native trees make excellent hedges.