colours, including carmine, scarlet, etc. Sepia is obtained from the inky discharge given off by cuttlefish; certain yellows are obtained from the camel; ivory black is obtained from ivory chips; Prussian blue is the result of horses’ hoofs having undergone certain chemical treatment; the charcoal from the vine stalk gives blue-black, and the madder plant supplies what is known as Turkey red. From Siam we get gamboge which is the sap of a certain tree; raw sienna and burnt umber are certain earths which have been burned.

Colonial Lanternists.

The perusal of a number of letters from the Southern Colonies, reminds us of the fact that there is a vast field open for obtaining customers in connection with substantial and light lanterns, and apparatus pertaining thereto. In many of the smaller towns there is no gas supply, and the usual illuminant that has to be resorted to for lanterns is the oil lamp. This, alone, is suggestive of a small disc and a single lantern; and such is not calculated to impress an audience with the grandeur with which pictures can under more favourable conditions be projected on the screen.

Here, in England, we can send for cylinders of gas, and despatch our apparatus by train, hire our slides, take a cab from the railway station to the hall, and beyond rigging up the apparatus have little trouble. Consequently, it is a somewhat difficult matter to sympathise with our cousins abroad, many of whom have to order apparatus and slides, which they have never seen, from this country, and get perhaps what they do not stand in need of, and also receive broken slides (broken in transit) in great numbers.

There is a good deal of apparatus in some of the Southern Colonies, but for the most part it is old, heavy, and out of date; and this, added to the difficulties of travelling, does not render the pursuit of a lanternist either pleasant or profitable. A reader of this journal in Western Australia, in a letter, says:—“Fancy having to carry your lantern, slides, screen, etc., on your back for nearly a mile with sand almost up to your knees, or else have to pay a high price for a carrier, when one is on his way to help a struggling church or mission of an evening after a day’s work.” Of course, a good limelight entertainment under such conditions becomes extremely difficult.

In carrying a supply of lantern slides, it does not take a great many pieces of glass 3½ inches square to become somewhat heavy after carrying them for even one mile, and for this very reason framed effect slides are quite out of the question.

A letter received explains the inconvenience of heavy apparatus. The correspondent says:—“A minister asked me to give a show for him at one of his mission churches, as he was ill. I took his buggy, and he wanted me to take his limelight outfit, including a 15 feet screen, 1 cwt. of iron, pressure boards, bi-unial lantern, and all the usual requirements, a distance of eight miles; but like David of old, I declined, preferring to use an old lantern with oil light. I left my office at 5 p.m., and with a few biscuits in my pocket, I got ready to give ‘A Tour in London’—operator and lecturer in one. It was a lovely moonlight night, and at 8 o’clock I only took 10s. at the door, so I set to work to personally canvass, and having eventually taken 30s., proceeded to give a two hours’ show.”

As we stated, there is a fine field for obtaining customers for lantern apparatus in the colonies, and the energetic dealer, who is prepared to supply a complete and light outfit, will have ample reward. With regard to the apparatus, it should be a light and folding bi-unial, an automatic oxygen generating apparatus, an ether saturator, etc. Respecting the slides, a couple of hundred slides printed on celluloid will weigh little more than a single slide on glass, and one or two sets of cover glasses, hinged together with a mat pasted on one of each set, is all that is required, for a celluloid slide can readily be slipped between them, when it is ready for use.

It might be said there are light lanterns on the market, automatic oxygen generators are obtainable, and plenty of celluloid slides are to be had. True, but when sending thousands of miles to half-a-dozen firms, one has to consider as to whether apparatus ordered from several different firms are adapted to one another; whereas, if a dealer advertised a complete light outfit consisting of everything desirable to commence an entertainment, we feel assured that he would meet with good support, especially from our New Zealand and Australian friends, where there appears to be a good demand but little supply.
The Magic Lantern in New Zealand.*

By W. H. Mathieson.

I THINK my communication will best interest the lantern public if I give a short description of the outlook of the magic lantern here in New Zealand.

Five years ago we had a visit from the great Sneeze, with a magnificent lantern and some dozens of good lecture sets. His outfit was said to be worth £1,000, but this I will not question; however, it must be said that he was the best all-round lantern entertainer who has ever appeared in the colonies. He was well advertised, and had a first-class operator who handled effect slides in a magnificent manner. Sneeze himself is a first-class singer, a pleasant speaker, and a good reciter, and always gave a very high-class entertainment, quite free from any trace of vulgarity.

In the large cities he had big and influential audiences, but, strange to say, in the smaller towns was a comparative failure. On one occasion he had a small audience which was very rowdy (not an unusual experience in certain parts of New Zealand), and he proceeded to give them a bit of his mind, when his audience retaliated by half-killing him.

For some time after this we received no visits from lanternists until two years ago, when we had one from an officer connected with the Salvation Army, who gave a very good entertainment with a bi-unial. He used a small tank, and made his oxygen as he went along, using a kerosene stove lamp. He employed a four barrel ether saturator, similar to that used by most of the professionals who have visited and travelled through New Zealand,

for in many of our small towns there is no gas supply. This lantern lecture was entitled, "Picture, Song, and Story," and was given in aid of the Salvation Army Infirm Officers' fund. From all accounts this lecturer made a good thing of it, as the local branches of the Army worked up his houses for him; thus in a few months' trip he is said to have made about £1,000. Previous to his visit to New Zealand he had been steadily travelling through the other colonies for over two years. He was a most enthusiastic lanternist, and showed some of the very latest effects, but, strange to say, he met his Waterloo in a small country village here, and

his beautiful lantern and slides, which were the very idol of his heart, and cost about £500, were completely destroyed by fire. This entertainer was likewise an amateur photographer, and took views of the principal places he visited. A specially fine set which he used to exhibit was of the diggings at Coolgardie, in Western Australia, which at the time he visited New Zealand was all the rage. The pictures of the diggers and their mode of life were particularly realistic.

During the last few months we have had two theatrical companies who have introduced the cinematograph into their programme. I went to see them, but it was unpleasant to watch, as the flicker was very great, and the pictures continually jumped about and got out of focus, although one set—the arrival of the Paris express train—was very effective. However, it is to be presumed that these faults will eventually be removed, and then possibly cinematographic pictures will take the place of the magic lantern.

As I write, there is a professional company travelling through the colony with a triple lantern; they give descriptive lectures on England, Scotland, and Ireland, together with appropriate songs and recitations, and I must say the manipulation of the lantern is really first-class. This company term their entertainment the Myriorama.

I had a long conversation with the lantern operator to this company on acetylene gas and kindled matters. He had used acetylene gas, and gave it as his experience that though superior to oil, it could not be compared to limelight; he considered it dangerous, and advised me against its use until its explosive properties were better understood.

Every town of any size here has its lantern operator, who has a good lantern and several sets of slides at the disposal of ministers and others, and nearly every church has what might be termed a toy lantern and a few sets of slides. With these every now and then we have a lantern lecture (?) in aid of some church or other object, and thus a few more shillings are extracted from the long-suffering congregation. I have been to several of these so-called lantern lectures, and the mere recollection of some of them is enough to make one shudder. Can it then be wondered at that the public are—to use a colonial phrase—"full up" of the very name of magic lantern? There are, of course, honourable exceptions to this, but the great majority are as above stated.

* Received too late for insertion in Annual.
I understand that Snezell is again coming here, and no doubt the recollection of his former visit will ensure even fuller houses than his first trip.

If that great lanternist, Professor B. J. Malden, could be prevailed upon to come here for a trip he would draw splendidly and have large audiences, but there are no people harder to please than a colonial audience, as many actors and lecturers have found out to their cost.

I will now give a word of advice to any professional who is thinking of coming out here. You must be thoroughly up to the times in your profession, and also find a new name for your show, as we have had plenty of myrioramas, panoramas, and a hundred and one other ramas. The people here are looking for something new, and I think it will be on the lines of the Cin., as it is popularly known here.

Should any reader interested in my remarks desire any further information, he may obtain my address from Mr. J. Hay Taylor, the editor of our Optical Magic Lantern Journal.

**The Beechey Trinoptic Lantern.**

**By Canon St. Vincent Beechey.**

We have been favoured per Mr. C. Watson, of Holborn, with the following remarks from the Rev. Canon Beechey, Hon. Canon of Manchester.

[Canon Beechey, who is the inventor of this form of lantern, has attained the age of ninety-one years, and we are pleased to say he is hale and hearty. Notwithstanding this great age, he is able to take an occasional run to London, from his home in Norfolk, in the pursuit of science to which he is still an active devotee.—Editor.]

"I little thought to see my old patent lantern brought up again, and I must confess I felt gratified to see a description of it in two numbers of the Optical Magic Lantern Journal. The account of it in the last number is wonderfully correct, with, however, one exception, and that is I never could get a 20 ft. picture, nor in fact any bright one over 10 ft. with the light I then had, and that was the reason I dropped it. I could not get a sufficiently all-round light for the large lantern lectures which I gave in those days gone by, viz., 1847, just fifty years ago.

"I say I was gratified to see this lantern again brought to notice, for strange to say, I have myself just resuscitated it in consequence of having got the electric light in my house, church, and school. I had come across a charming little arc lamp, made by Woodhouse and Rawson, but this Midget lamp is, I fear, no longer made. However, with the lantern and this lamp I get a good all-round light, with 50 volts and 8 to 10 amperes.

"Having met with success in this direction, I have just completed a new electric trinoptic lantern (a photograph of which is reproduced). The front consists of three sides of a hexagon, and the back is square. As the centre nozzle is a little nearer the screen than those at the sides, I use in it a lens of slightly shorter focus in order to compensate for this.

"At the end of the two side objectives there are prisms of eighty degrees angle; these can be moved sideways so as to make the discs move sideways, thus two or even three pictures can either be placed on the screen side by side or central, one on the other, or by the same means a figure or ship in the side stage can be made to pass across the picture projected from the front nozzle.

"Each front is provided with a shutter for dissolving purposes. These shutters, which are placed close to the lens, consist of two plates of brass, one over the other, from which a V shaped