

author or producer, whether he receives "a valuable consideration" or not for his work, and that the purchaser of such artistic work has no equitable or just right to have same copied or reproduced unless the copyright has been legally assigned to him by the author.

Now, if this contention of equity can be substantiated, and proved by sound argument to be justifiable, we fail to see how the legislators in a country which boasts of its democracy can longer refuse to grant the protection afforded by such a copyright, especially when it can be clearly shown that it is necessary in the best interests of the public, and that it will also have a considerable influence towards raising the standard of artistic and photographic work in the Dominion.

Many will say, "I paid for this photograph. It is my photograph, therefore I can do as I like with it, and employ anyone I wish to make reproductions of it."

This very common statement is generally made without thought, and contains no argument. The argument is not so much whether, after an individual has for certain reasons selected a particular photographer to produce his portrait, he has then the right to have it reproduced by other than the original author, but whether *other* than the original author has any equitable or just right to reproduce such portrait for "a valuable consideration," and thereby deprive the originator of the portrait of the just profits of his labour.

A photographer does not sell the knowledge, skill, individuality or idea he puts into the production of the negative; he sells only a certain number of prints or pictures from such negative at a stated price.

To reason this point by analogy: Take the author of a book; he is granted copyright in his book, although he receives "a valuable consideration" by the sale thereof. It is recognised that he sells the result *only* of his acquired knowledge and ideas in the form of a book; the photographer sells the result *only* of his acquired knowledge and ideas in the form of a photograph or picture; but, for some unknown reason, this has not up to the present been recognised by our legislators, and the present law permits any unskilled and unscrupulous copyist to plagiarise and reproduce the ideas contained in a photograph, and to sell them as his own, and thereby rob the author of his just reward. In most cases these copyists go so far as to sign their own names to the plagiarism. To sell the ideas and thoughts of an author of a book is a crime, yet to sell the ideas and thoughts of a photographer is justifiable according to the present law. Where is the equity?

The above argument is sound, and is founded on precedent, for all Governments have recognised that it is only just and equitable that *original ideas* should be protected, and have at all times legislated accordingly.

There is no need of argument as to whether photographic work contains original ideas, as this point was settled as far back as 1862 by the British Government, when photographic work was included in the Artistic Copyright Bill of that date. This Act is still the only protection at law enjoyed by portrait photographers; for, as stated before, the

New Zealand Act of 1896 does not include portraiture; and, moreover, the New Zealand Act was rendered of very little practical use by the introduction of the "valuable consideration" clause. The only advantage gained in this Act is that New Zealand landscape photographers can now protect any photograph, for which they have not received a valuable consideration, for the term of five years without registration. In fact the passing of this Act in its present form was, it seems to us, a waste of time. Now the only protection at law enjoyed by the portrait photographers of New Zealand is the British Act of 1862, and this Act is of little or no practical use for two obvious reasons: (1) On account of the bugbear clause *re* valuable consideration; (2) because of the condition necessitating registration. The deletion of the "valuable consideration" clause from any future Photographic Bill is the only point on which there can be any debate, for under the present law a photographer may copyright only a photograph for which he has not received valuable consideration. In the first place, he does not receive a valuable consideration for the idea contained in the negative, but it is obvious that he must receive some payment for his work. This he receives from the sale of positives or prints, in like manner with the author from the sale of his books. Therefore there is no reason why the copyright should not be vested in the author or producer of a photograph. It is absolutely the only method of protecting the public and photographers from an organised army of unscrupulous copyists, whom photographers under the present law are powerless to combat.

Many other arguments could be brought forward to support this contention.

With regard to registration, we think it would be granted that almost any form of registration must prove unworkable when it is considered that a photographer makes from one to twenty negatives a day of different individuals, and any mark or word such as "Protected," name and date, etc., such as required by the present New Zealand Act for landscape work, is cumbersome and greatly mars the artistic beauty of small work.

Making Moving Pictures

Probably the highest pinnacle of success to which the photographic art has attained is in the presentation to us of those marvels of modern science known as moving pictures.

We have all seen the finished result in the Theatres, but probably few realise the immense amount of careful thought and scientific ingenuity which was expended before we enjoyed our evening's pictures. Without going into the "acting" side of the question, which, of course, is a great industry in itself, we will endeavour to give some idea of the working of cinematograph machines such as are employed at the principal theatres. Progress is indebted to Mr. Joe Dunn, of the King's Pictures, for the information contained in this article.

There are three instruments or machines employed before the pictures are thrown on the screen. All of them embodying the same mechanism and principles,

though each has a function of its own. The first, of course, is the camera, which takes the negatives from which the finished pictures or positives are printed. The sensitised film on which the pictures are taken is contained in a perfectly light-tight magazine with internal gear to permit of the winding and unwinding of the film as required. Another magazine, precisely similar to the first, is provided for the exposed film to wind in, after passing through the camera. The passage of the film through the camera is controlled on a dial outside, facing the operator, so that he can see at a glance how much is exposed and how many feet of film he has left. The intricate mechanism which takes the pictures, is operated at will by turning a crank. The film apparently passes continuously through the machine, yet there is a distinct pause for each picture to be taken. That is to say, each time the lens is exposed the film is stopped automatically, and it does not pass on again until the lens is covered, otherwise the pictures would be blurred. The pause occupies only an infinitesimal fraction of time, as may be judged when at the average rate of picture making there are 16 exposures and 16 closures each second. The most common, and perhaps the best lens used is a 3-inch Dallmayer Stigmatic working from F5 to F22, sharp at full aperture. It gives simply marvellous results when one considers that the little picture 1 inch by $\frac{3}{8}$ of an inch enlarges to 30 feet by 26 feet, and shows a perfectly sharp picture, that size at a distance of 140 to 150 feet.

The process of development requires great care, owing to the rapid nature of the film, and is carried out in a dark room filled with special tanks for the immersion of the film, which is wound upon frames carrying about 100 feet each. The developer used is from any of the standard formulae for rapid negatives, and when the film is immersed, the operator has to stand by with the bromide to restrain the development should it flash up too quickly. A few seconds delay might spoil the whole film. There are also tanks for washing and fixing, through which the frames go in due course, after which the films are wound on cylindrical slat frames, gelatine outwards, for drying.

After drying, the next process is printing, or making the positive which eventually reproduces the picture on the screen. This is performed by a machine which is, in its working, similar to the camera, except that the light is supplied from inside by an 8 c.p. 100 volt Osram light, which is adjustable to suit the varying intensity of the negative film. This requires great attention, and the operator watches it critically as he turns the handle. No lens is used in this process, the negative and the blank film, which is to form the positive when developed, being both passed by the same set of cogs and claws and pressed closely together, over the aperture from which the light is passed through the negative on to the positive film. The same ingenious arrangement as in the camera permits of movement of the film only when the light aperture is closed, and automatically locks the film in place while the light is exposed.

The positive film is rolled on racks and developed in the same way as the negative, except that it is a much slower pro-