

resents the group of the first P. A. of A. Convention, held at Chicago at the time named. I have about forty or fifty copies only, so that I think those who were present are entitled to have them first. They will be presented in this order.

The negative was made on a Carbutt "Keystone" dry-plate; exposure two seconds, with double lens; equivalent focus ten inches; stop F. 40; exposed through glass to get a reversed image. The prints were made by the permanent artotype process, Harroun & Bierstadt, printers. They are not much as specimens of photography as we view such now, but they are a good representation of what photography was at the time they were made. (Applause.)

PRACTICAL SUGGESTIONS ON TIN-TYPING.



ESSRS. HYATT, of St. Louis, Mo., have issued a pamphlet, giving the following practical suggestions for tin-typing:

Suggestion No. 1.—
Preparing the silver bath:
Provide a glass bath and

box with a rubber dipper for immersing your plate in the solution. Then dissolve 4 ounces nitrate of silver in 42 ounces of distilled water. When thoroughly dissolved, test with a hydrometer. It should test about 40 grains of silver to the ounce of solution. Then add a small piece of iodide of potassium (about the size of a pea); shake well, and add about 10 drops of nitric acid, C.P., or enough to turn

blue litmus paper slightly red, which is an indication that the bath is acid. Now filter the bath very closely through absorbent cotton, after which the bath will be ready for use.

Suggestion No. 2.—Great care must be taken with the silver bath to keep it free from foreign matters of all kinds, such as hypo, iron, or even an over supply of iodide of potassium or nitric acid. Most any of the above is sufficient to create discord and cause trouble, in which case we refer you to suggestion No. 5.

Suggestion No. 3.—In the start of a new bath, you will observe that the tin-types you produce are inclined to have a slight scum or web over them. Don't try to doctor the bath by adding more acid or iodide, but let it act so, and in a short time it will produce the finest results.

Suggestion No. 4.—After working bath very hard, test it with the hydrometer, and if it tests below 35 grains take 4 ounces of distilled water, or more if you wish, and pour the bath into the water, *not the water into the bath*, shake the solution well and filter. After it is filtered then add nitrate of silver until the hydrometer test is 40 grains. Your bath will then be ready for use in the morning. This should be done each evening after a day's work.

Suggestion No. 5. — You should always have extra baths on hand. While working one have the other baths in bottles and hung up by a string tied around the neck, or standing in some safe place where the sun will shine on them as much as possible. When No. 1 gives out, bring in No. 2, filter it, and it will be ready to take