At your request I give you some of the practical experiences of an old veteran Daguerreotypist, some of which have not (to my knowledge) before been published, and, so far as I know, were only known and practised by myself.

Much has been said and written about the slow Daguerreotype and long exposures required to make a fully exposed plate, and the wonderful improvement of the instantaneous dry-plate. The following facts will show how much gain in rapidity the latter has made over the former.

In the early summer of 1851 I made a series of views for “Harpers’ Traveler’s Guide” of all the towns between Galena and St. Paul that were then settled on the Mississippi, from the pilot-house of the steamer “Nominee” while under full headway, that were just as sharp as if taken from a fixed point. The pictures were taken on what we then called a half Daguerreotype plate.

I had constructed a drop-shutter, the first and only one I had ever seen or heard of—had it made at a tin-shop—and practically the same as is now in use. In the drop I made a slit half an inch wide, and extending entirely across the diameter of the lens. The drop was accelerated in its fall by a stout rubber spring. The lens was a “C C Harrison” single view. When the boat was far enough away so that all the village was embraced in the plate it was at once put in place and the shutter released, the plate put away in a light-tight box, and not developed until I got back to Galena.

How did I get the rapidity? Simply by having a pure silver surface exposed to the right proportion of the fumes of iodine and bromine. And here was the secret. Coating the plates two or three weeks beforehand and keeping in light and airtight boxes! The longer they were kept the more rapid they became! When properly prepared, the time was reduced from minutes to seconds!

The plates could be exposed and developed at any future time. Many, both in and out of the profession, wondered at the soft and delicate detail both in shadow and high light, and roundness of the portraits I exhibited at the Crystal Palace in 1853, and tried in vain to equal.

None of the pictures had received over five seconds’ exposure! Hence their lifelike pose and expression.

Rapid or short exposures were also obtained by charging the plates with electricity generated by giving the plate for the last finish a brisk rubbing on a white silk-plush buff;
but this was only effectual in a dry, warm atmosphere. When thus treated I could get rapid plates about one-sixth the usual time, but unless the temperature and atmosphere was right the exposure was only retarded, so I had to abandon that as very uncertain.

_A. Hesler._

[End of text.]