"So much for the positive identification of a stone," said Burrow

Six months passed, and there was no hope, whatever, of recovering the diamonds. Burrow called on Mr. Skidmore.

" Any news now, Burrow ?"

" The diamonds are clean gone, but I think I have found out how the job was done. Would you like to hear my view ?"

Mr. Skidmore had been treated for a nervous disorder, and he was not yet well. His voice was rather tremulous when he replied :—

" Certainly, Mr. Burrow."

Mr. Skidmore turned his face from the detective, and appeared to be closely studying the pattern of the carpet.

" Being on another job, by a half chance I discovered that paste imitations of Mrs. Skidmore's jewels had been made by a Paris house, about two months before the robbery. Also the imitation jewels were put into a case, corresponding in colour and shape with Mrs. Skidmore's jewel case. What do you think of that, sir."

Mr. Skidmore had to clear his throat before he spoke, and still his voice was husky.

" What have paste jewels to do with the stealing of my wife's diamonds ?"

" It is the true clue, Mr. Skidmore, just as the rope tied to the balcony was a false scent. The indentificatior of the big stone was correct. The genuine diamonds were stolen weeks before the imitations were taken from the iron safe. You are pale, sir, and you are shaking as if you had the ague."

" I am not well. I suffer from nervous attacks."

" I could run in the accomplices. Say, a bill discounter who dusts forged bills, a notorious blackleg gamester, and a foreign party who deals in stolen jewels. But what is the use of running in the accomplices if you mustn't touch the principal ?—especially as not a sixpence of the property can be recovered. I have my eye on the principal, and can show you his photo. There it is, look at it."

With a trembling hand, Mr. Skidmore took the mounted photograph from Burrow. He looked at it, groaned, gasped for breath, and dropt it.

" Dear me, Mr. Skidmore, I have not given you a photo, but a hand mirror. It is your own face that has scared you."

Mr Burrow put the hand mirror into his pocket.

" It is a queer game, but not new or uncommon. No wonder the detectives are often baffled over these jobs. Good day to you, sir. I think you will now agree with me that to me, as well as to you, the Skidmore jewel robbery is not a mystery."—*Life.*

HOW WATCH CRYSTALS ARE MADE.

Many of our respected readers, although daily handling this unpretentious component of a watch—its crystal, will only be tempted when reading the above headlines into making the inquiry : How are watch crystals made ? We will endeavor to elucidate this subject to the best of our ability, and will invite them to accompany us in a visit in imagination to such a factory.

The work of the celebrated chemist, Piligot, *Glass, its History and Production*, will help us to elucidate the methods and manners of fabrication.

Watch crystals formely where simple spherical segments, and where separated from small glass spheres by means of iron rings red heated in fire. These *calottes* (segments) must necessarily be very arched, to submit sufficient play to the hands. An irregular fracture occurred hereby, and the subsequent attempt of correcting it with imperfect tools often entailed the total loss of the crystal. The rim was then finished upon a disc or grinding wheel.

The invention of the cylinder watch permitted the use of a much flatter crystal, and the defects of the highly arched glass were still more keenly felt. Several Parisian watchmakers manufactured concave glasses for these watches, pressing them of a square piece of flat glass and rounding the rims, which method was imitated in Geneva.

This kind was at first made of a round glass or crystal disc, giving it the necessary height for the motion of the hands; the rim was next corrected, and finally they were cut to correspond to the bezel of the lid. This method of hand production being very expensive, the crystals were very dear; the watchmakers sold them from three to five francs per piece.

Toward the year 1680, concave crystals called Chevé crystals, were manufactured at Gotzenbruck in a greatly improved manner, by blowing glass balloons in shape of a bottle with flat bottom, and the latter, when separated, furnished the desired crystal. These bottles were blowned by skilled workmen without the use of a model, and only a scale showed hem the diameter of the piece.

These crystals were also manufactured in like manner in Bohemia. The bottom of the flask was separated while in a hot condition, and received a somewhat heightened rim, which was cut level-shaped to fit it to the case bezel. The making of each crystal requiring a separate flask, the price remained pretty high, in spite of the great speed obtained in there manufacture; they commanded from fifty to sixty francs per gross.

Shortly afterward, the same factory manufactured thicker, so-called double Chevé crystals, which commanded a price of sixty francs per gross, at present only ten to twelve francs. A great improvement in their manufacture has since occurred. Instead of a small flask for each separate glass, with a diamond fastened to a sort of a compass, a number of calottes were cut from a balloon of about fifteen centimeters diameter. The diamond formed the moveable shank of the circle; the other shank was replaced by a piece of leather or chamois skin, laid upon the glass ball. The shank carrying the diamond could be lengthened or shortened to suit the diameter of the crystal to be furnished. By this fabrication, of 100 blown glass balls, on an average only fifteen could be used for watch crystals; the balance found its way into the wastage.

This method has been very materially improved by the superintendents of said factory, Messrs. A. & T. Dalter, to both of whom the watch crystal manufacture owes its great advancements. The small spherical callottes are at present cut of large balloons, of from 75 to 80 cm. in diameter. From a single one of these spheres, as many as four gross crystals are cut, not to take into account several hundreds of small crystals for Nurnbergian toy watches. About one-half of the spheres may be used at present, instead of 15 of 100, as heretofore.

The progress, together with other further perfectionments made in cutting and polishing the crystals, have gradually lowered their price; ordinary Cheve