

TO FIT A BOUCHON.

After repairing the pivot, a bouchon is selected as small as the pivot will admit. Open the hole of the plate or cock so that the bouchon, which previously should be lightly draw-filed at the end, will stand with a slight pressure upright in the opened hole of the plate or cock, then, with a knife, cut it across at the part where it is to be broken off so that it may break very readily when required to do so. Press it in the plate on the side the pivot works, break off, and then drive it home with a small center punch. In every repair of this nature, notice should be taken of the amount of end shake of the pinion, and allowance made by leaving the bouchon so that any excess may be corrected. To finish off the shoulder end, a small chamfering tool should be used. It has a hole smaller than the pivot one to receive a fine brass wire, serving as a center to prevent the tool from changing its position while being used, or the wire may be put through the bouchon holes, and then the hole of the tool may be left open. The above is a far more expeditious way than using the turning lathe.

TO RESTORE THE COLOR OF NICKEL MOVEMENTS.

A correspondent of the journal *Suisse d'horlogerie* recommends the following method: Take 60 parts of rectified spirits of wine, 1 part of sulphuric acid, and 1 part nitric acid. Dip the pieces for about 10 to 15 seconds in this composition, then dip them in cold water, and afterwards in rectified spirits of wine. Dry them with a piece of fine linen, or in sawdust. Nickel and the greater part of those metals liable to tarnish, may be restored to their primitive color by dipping in the following bath: Dissolve in a half a glass of water, 6 or 7 grains of cyanide of potassium; plunge the pieces in this solution and withdraw them immediately. As the cyanide mixes well with water, it is sufficient to rinse them once in the latter to destroy any trace of the cyanide. After, this, dip the pieces in spirits of wine, and dry them in boxwood dust, in order to keep them from rusting. The balance even together with its spring, can be subjected to this operation without any danger. If the pieces to be restored are greasy, they must be cleaned with benzine before being dipped in the cyanide,

because it will not touch grease. Cyanide of potassium, being a violent poison, great care has to be exercised, and the operation should be performed in a well ventilated place. The same bath can be preserved in a bottle, and serves for a long time.

PERPLEXITIES OF THE CLOCK WINDER

The principal of a college had charged an old man with the care of the steeple clock of the seat of learning. In a short time afterward, the latter presented himself before the principal with a woe-begone face. "Well, my man, why do you complain—is it too much work to wind up the weights?" "No, not that," he replied, "if the clock don't go fast enough, especially at noon, I have all the students of the college swearing at me, and in order to content them, I move the hands forward; but the townspeople, on the other hand, complain that the clock goes too fast, and I set the hands back to satisfy them; so between the two I am always in hot water, and I would prefer some other job." The principal in trying to console him, said: "I will give you one piece of sound advice. Let the clock go of its own accord, as the watchmaker has regulated it; do not try to suit everybody and you will live in peace."

BRONZE POWDERS.

"It is perhaps, little known," says the *Chemische Zentral Anzeiger* "that the celebrated inventor of the Bessemer steel preparing process, Sir Henry Bessemer, invented in early youth a method of manufacture, and the most remarkable fact is that he kept the process a secret for more than 40 years. The different bronze powders were in the first third of this century sold at enormously high prices, in spite of the cheapness of the material from which they were manufactured. The process, according to which it was manufactured in Germany, was unknown in England, and Bessemer, after two years' work, built machinery for manufacturing it, of which five produced as much as 60 skillful workmen could. The machines were built in pieces in various shops, and by Bessemer himself put together in nine months. No one beside the inventor himself and five trusted workmen has ever entered the working-room, so that even to-day, after 40 years, no one has yet witnessed how

the bronze powders are manufactured. Three of his assistants have died, and Bessemer a few years ago, presented the factory with all its business to the two survivors as a reward for their fidelity.

EAR DISEASES.

In a recent number of the *Archiv für Ohrenheilkunde*, Dr. Buskner gives an interesting result of inquiries made by himself and other aural surgeons, as to the statistics of ear diseases. They may be summed up as follows. One out of every three persons in middle life does not hear so well with one ear as with the other. An examination was made of 5,905 school children, of whom 23 per cent. presented objective pathological symptoms of ear disease, and 23 per cent. a diminution of hearing power. The liability to disease in the ear increases from birth to the fortieth year of age, and decreases from thence to old age. Men are more subject to ear affections than women, in the proportion of three to two. The external ear is affected in 25 per cent. of sufferers, the middle ear in 67 per cent., and the inner ear in 8 per cent. of total diseases. The left ear is more frequently affected than the right, in the proportion of five to four. Acute affections of the middle ear occur less frequently in summer and autumn than in spring and winter, and of the total number of cases in the ear clinics, 53 per cent. are cured, 30 per cent. are improved, 7 per cent. are unimproved, and three-tenths of 1 per cent. end fatally.

SPECIAL NOTICE.

Jewelers throughout Canada will oblige the Editor by sending in to this office for insertion in these notes any items of news pertaining to the Jewelry business that they think would be of interest to the Trade generally.

BUSINESS NOTES.

MR. JOHN W. CAMPBELL, buyer and traveller for the firm of Rothschild & Co., of this city called on us the other day. He reports trade fairly good, and looks forward to something better in the near future.

WE LEARN by circular that the business formerly carried on by Messrs Schwarz & Reinhardt of Montreal, as manufacturers of jewelers' cases and supplies, has been bought by the Reinhardt Mfg. Co., who will carry it on in future.

THE FIRM OF MESSRS. E. & A. EAVES, wholesale jewelers, of Montreal, dissolved last month by mutual consent. Each of the part-