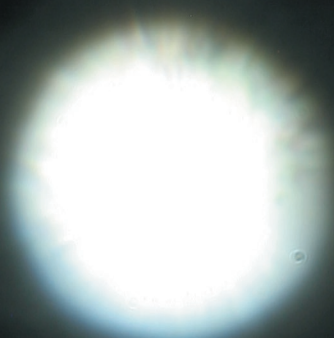


*Angular Momentum
of Switzerland*

... a glance through the microscope ...



Verre Églomisé

Miniature Painting on the reverse of a Sapphire Crystal

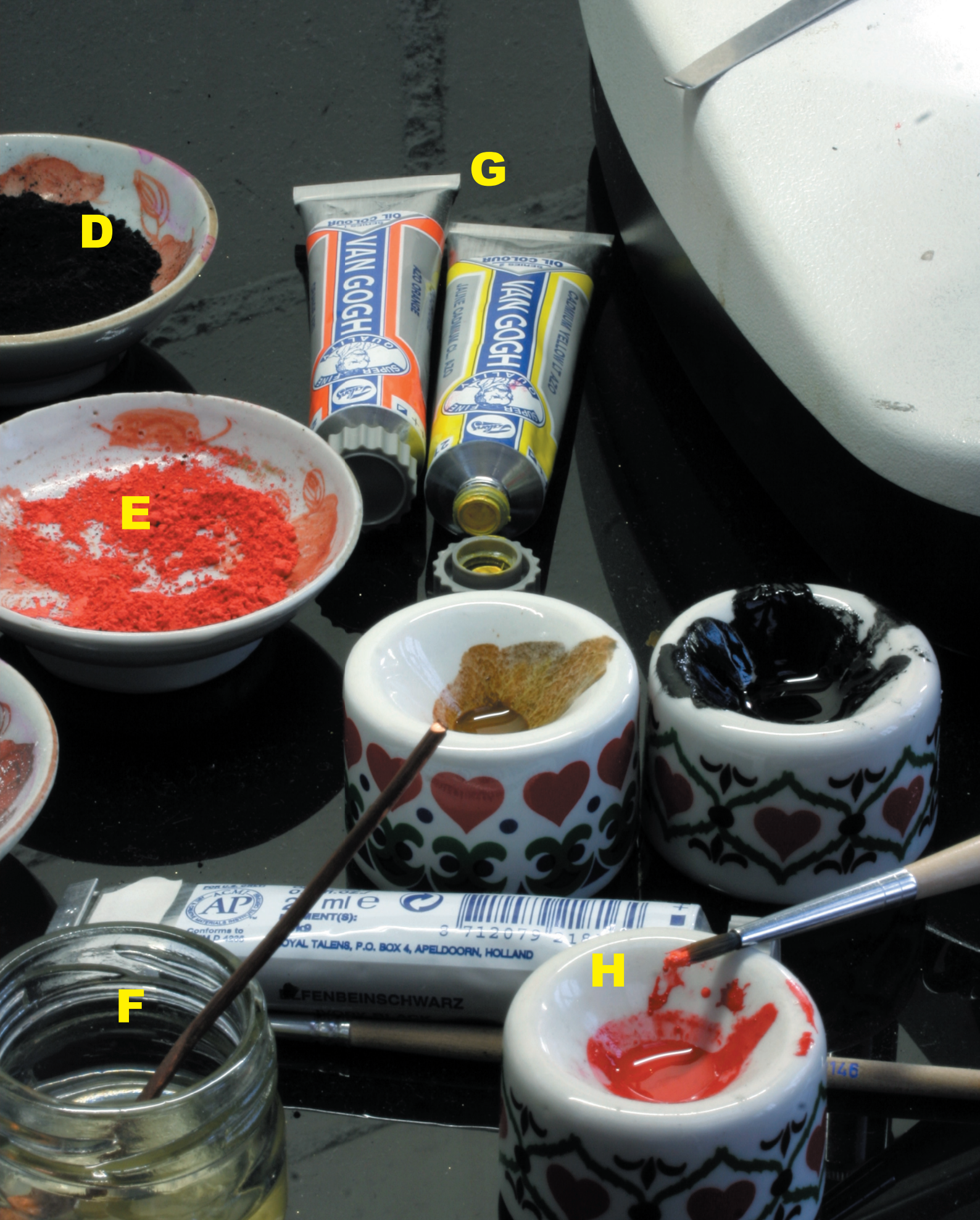


Montre Verre Èglomisé - *Feeding the Ducks*

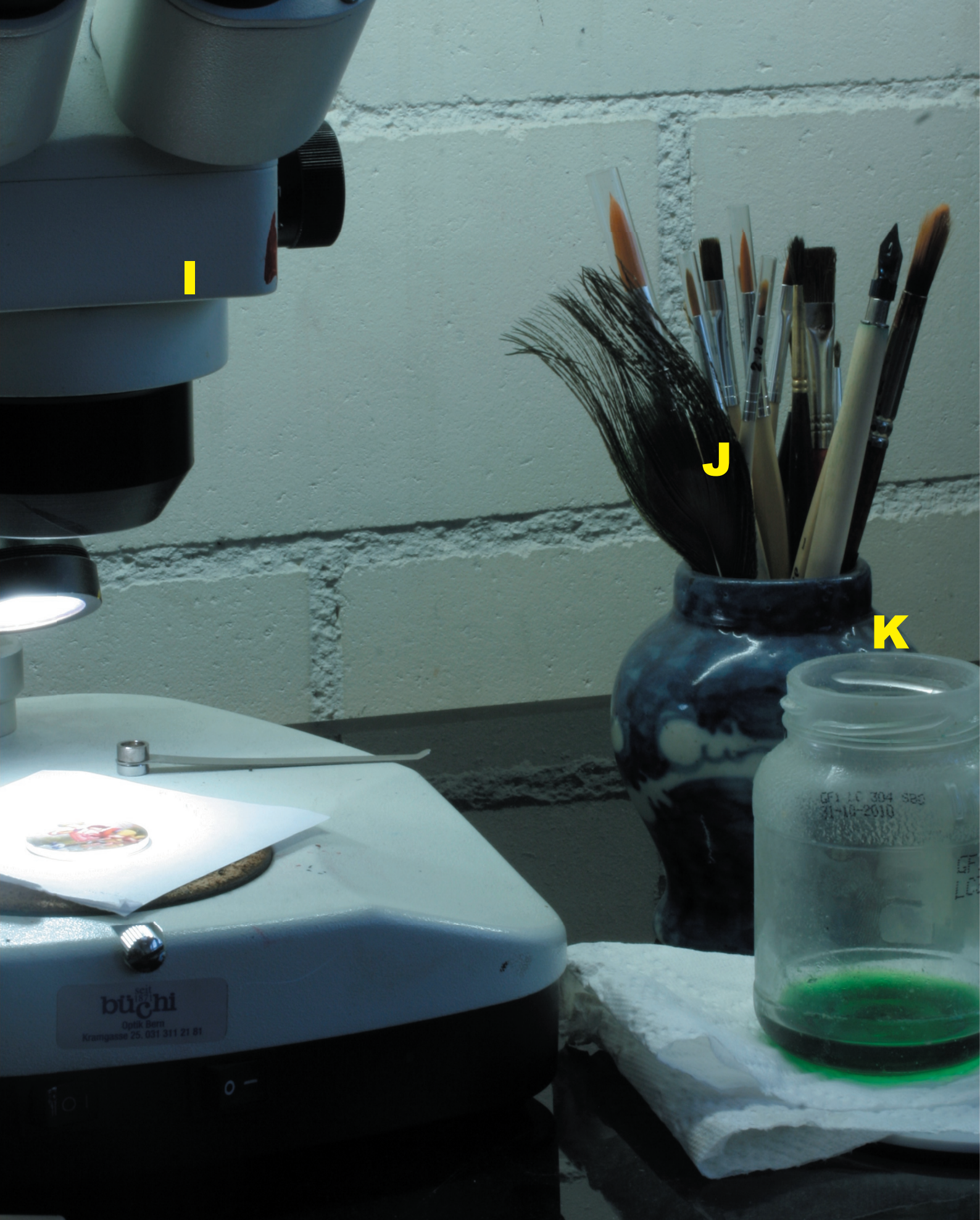
Staybrite steel case, 8.00 mm hand-winding crown with cabochon Onyx, mechanical hand-winding movement, case caliber 39.00 mm. A Verre Èglomisé Miniature on the reverse of the sapphire crystal. The picture is made after an enamel miniature on a pocket watch „Feeding the Ducks“, made for Oriental market circa 1820, Geneva, formerly owned by collector Lord Sandberg, sold by Antiquorum



For making a Verre Églomisé Miniature, we use a number of tools and material. A-Venetian Turpentine Oil, B-Yellow color pigments, C-White color pigments, D-Brass tools with extremely thin steel needles. These tools are made by the artist.



D-Black color pigments, E-Red color pigments, F-Turpentine oil, G-Also regular oil color can be used. H- Pigment mixed with Turpentine oil



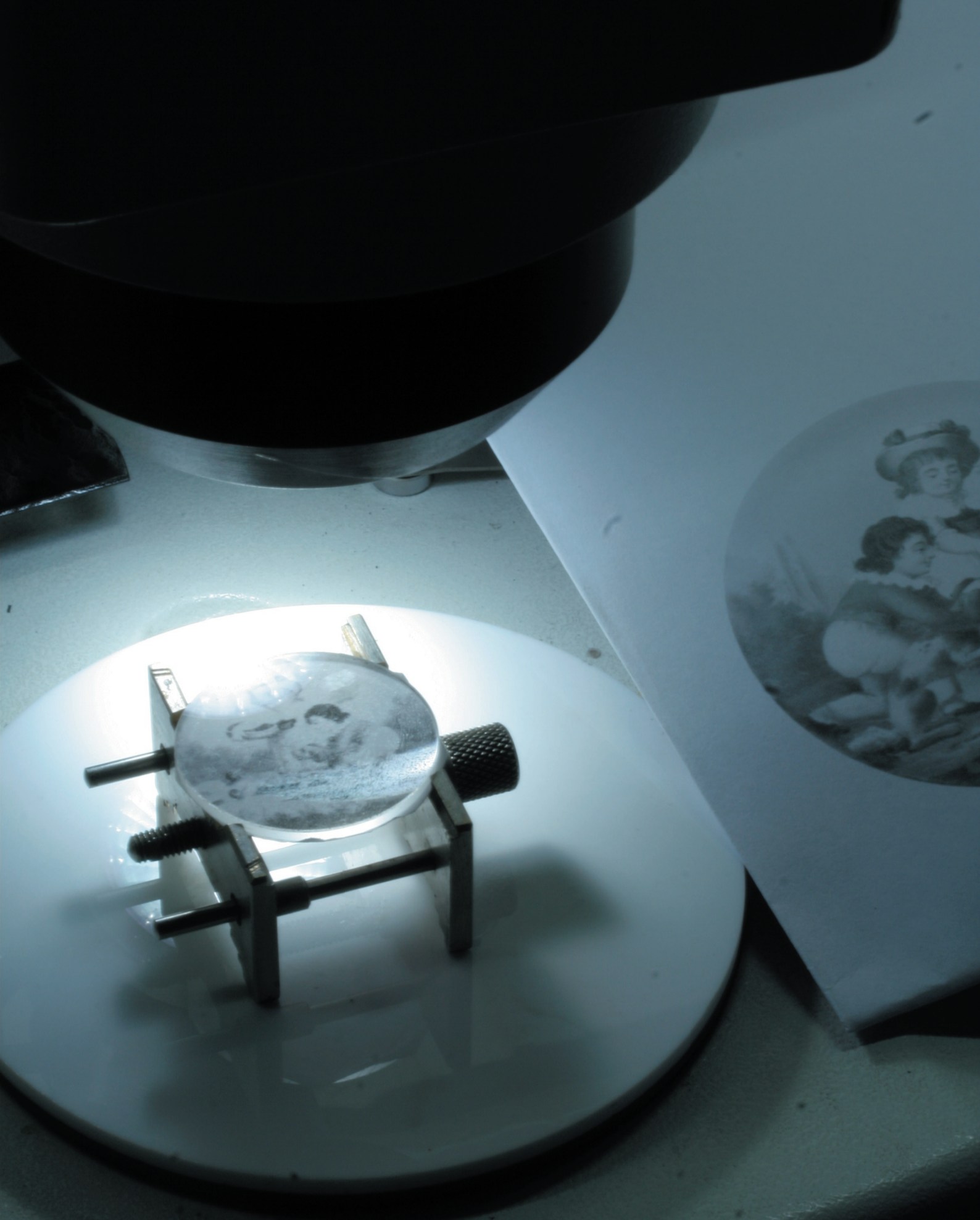
I-Microscope with a Magnification of 20 to 40 x, J-Variou brushes (synthetic brushes are considered as best), Aqua Regia oil.
Kings Water (aqua regia) is a mixture of 3 parts Hydrochloric acid and 1 part concentrated nitric acid. With aqua regia also precious metal preparations for porcelain and glass painting are produced.



In a first step, the sapphire crystal must be cleaned, first boiled for one hour in Hydrochloric acid. In a second step the crystal is cleaned under clean water and then kept in the oven at 250°C over night



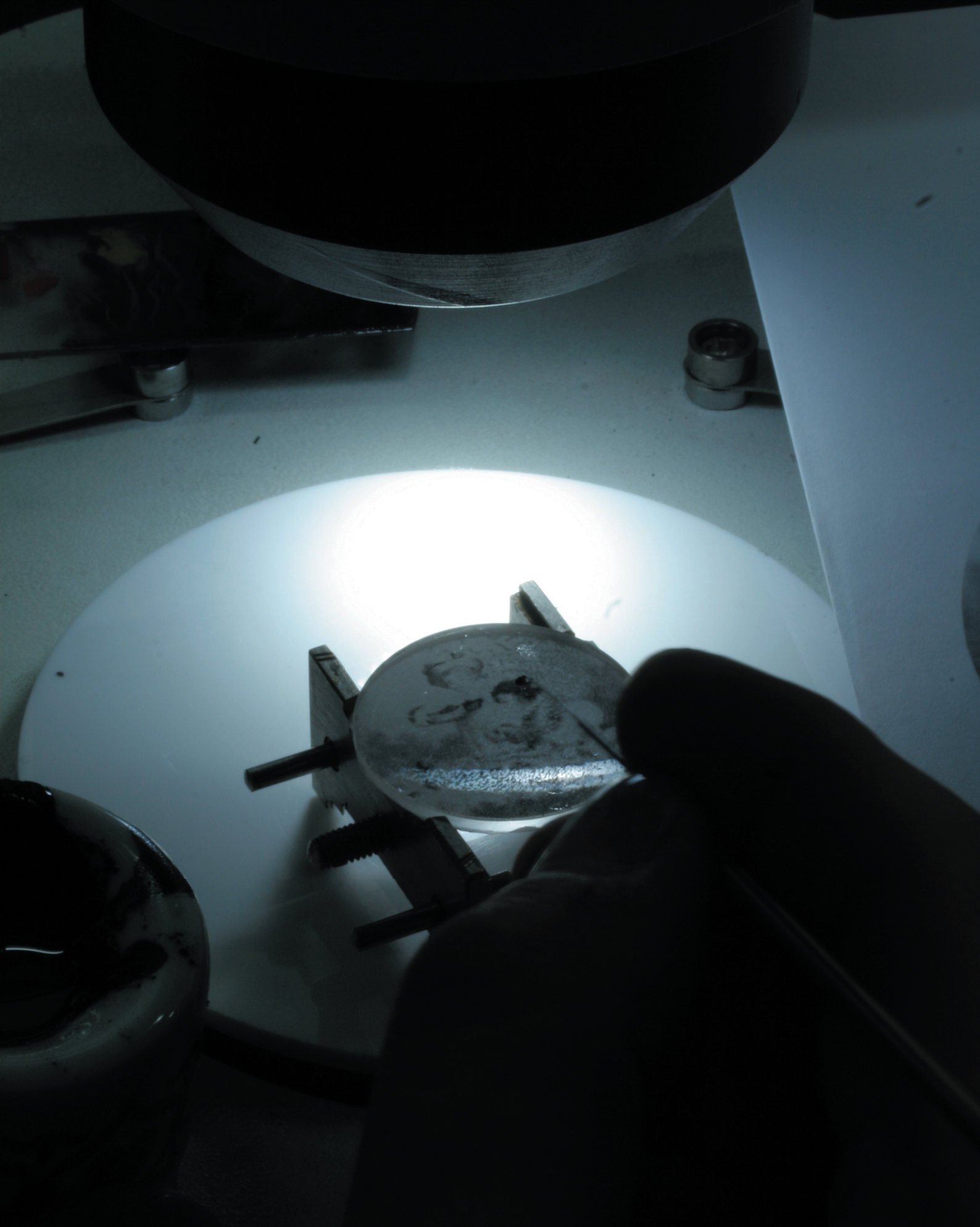
After the sapphire crystal is cleaned as described above, a mirrored paper copy of the image is printed. Its a black and white copy which is fixed on the front of the crystal preferrably with simple spray mount.



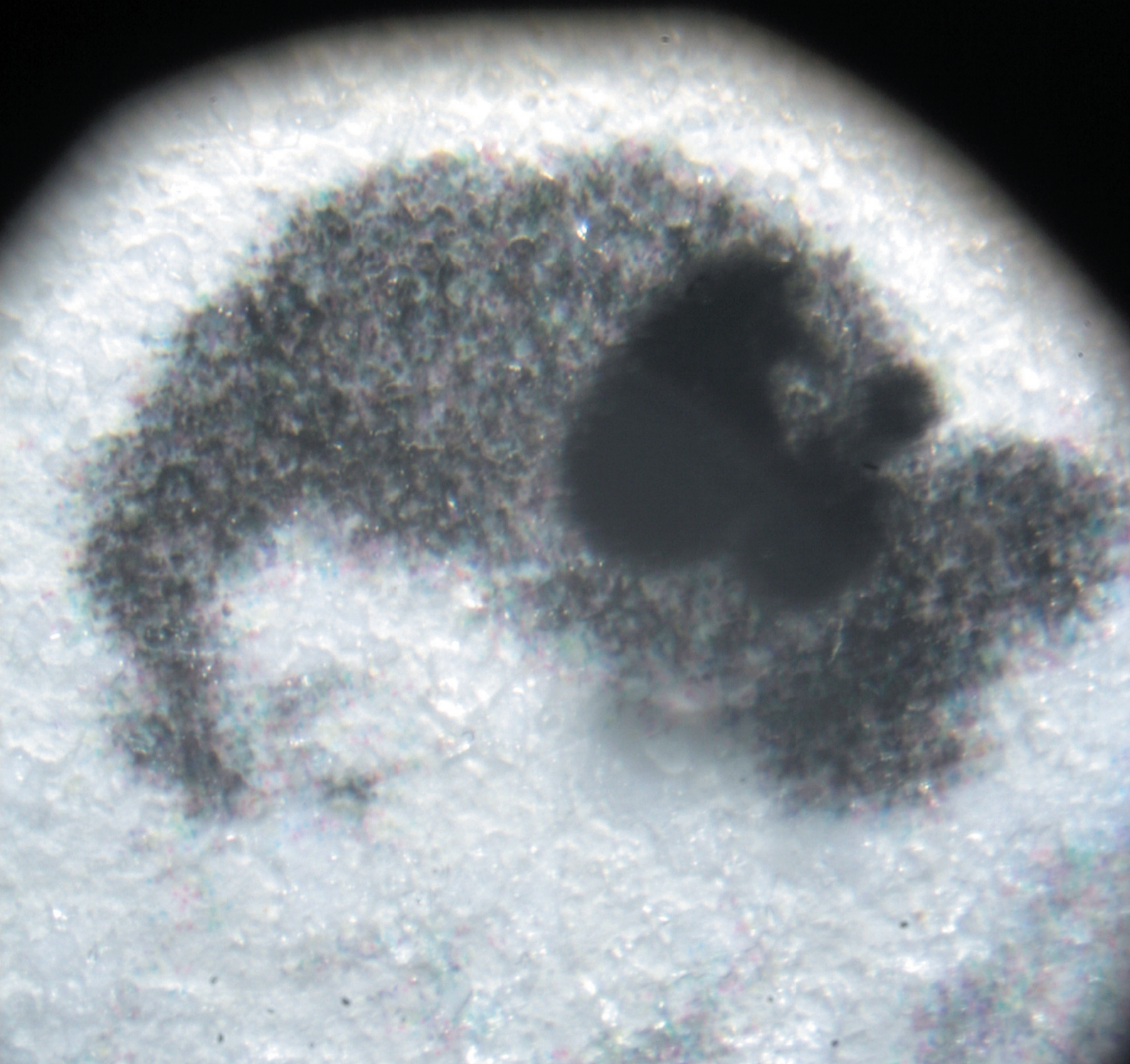
Then the crystal is fixed back side up in a holder and placed under the microscope.



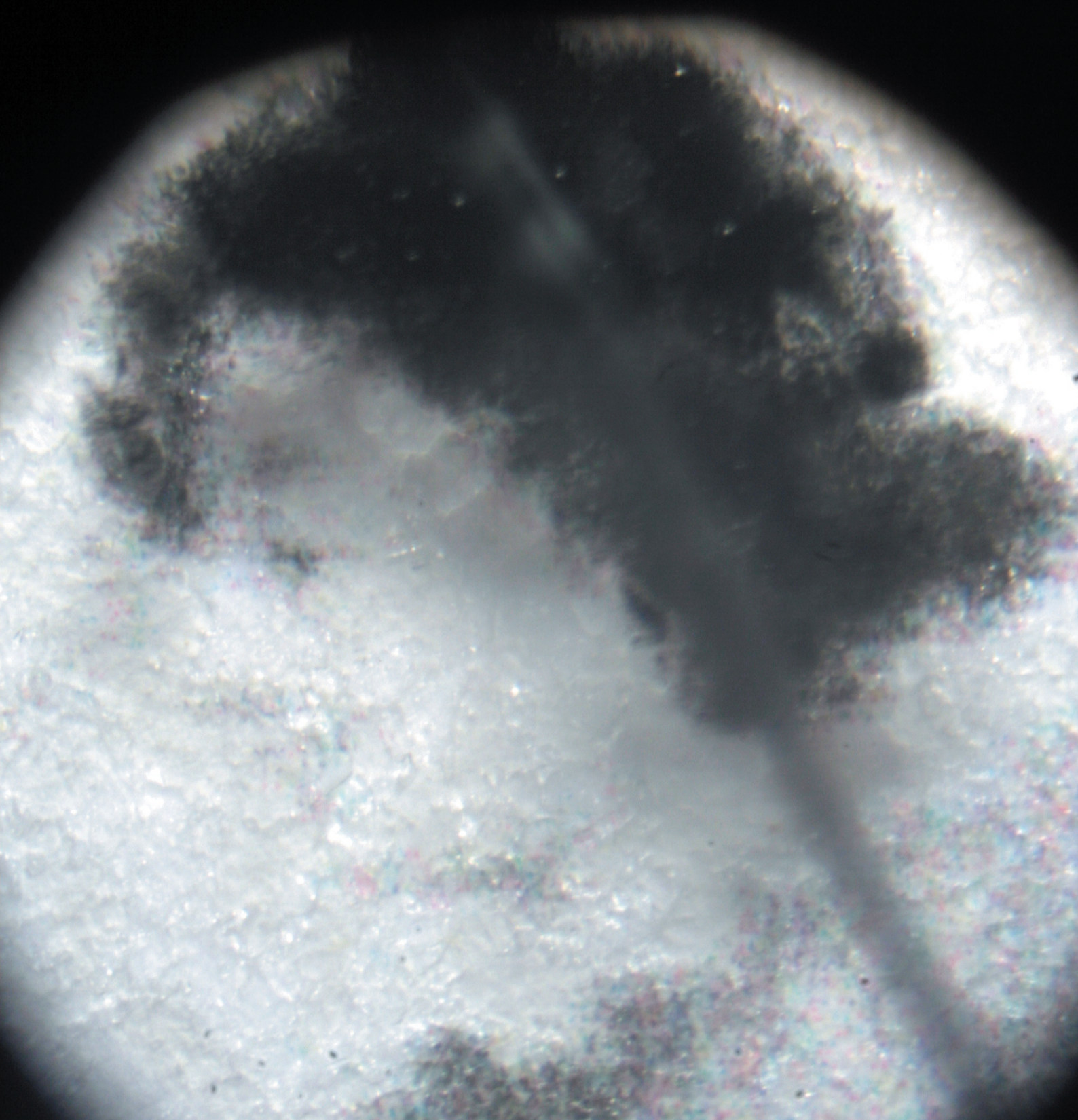
With a bush, a thin layer of Aqua Regia Oil is applied on the whole surface of the sapphire



After the Aqua Regia oil has set, black natural pigments mixed with Aqua Regia oil are set over the printed copy as transparent or opaque as on the copy underneath.



Since the lens of the microscope is positioned vertically over the image, the pigments can be set very precisely. The black pigments have been calibrated extremely finely by filtered through a cotton cloth.



Since the black pigments „swim“ in the Aqua Regia Oil, pigments can be moved, removed, diluted or thickened easily.



After the work with the black pigments is finished, the sapphire is laid horizontally under a glass Protected from dust. It takes the oil and pigment around one day to set. During this rest period the pigments fall to the surface of the glass and parts of the Aqua Regia Oil evaporate.



After the pigments have set, the picture can still be refined or optimized by working on it with pins, sticks, removing or adding pigments.



The sapphire crystal shown from the front side after black pigments have set



After the work with the black pigment is finished, the sapphire crystal is heated in an oven. The temperature shall be around 100 and 120°C. It will take some hours until the oil has dried completely.



Then the colors are set over the dried black base. Before setting the colors, first a thin layer of Turbentine Oil is applied to the entire surface. Then pure primary color pigments - Yellow, red, blue - can be mixed in Turbentine oil and applied on the picture, over the black layer.



Also regular oil colors can be used and set on the picture



After the color pigments have set, the sapphire crystal is again put in the oven until the oils have completely dried. The temperature shall not be higher than 40°C. Otherwise the colors can melt or cracks appear. The oil colors also dry properly at room temperature but it would take up to 3 or 4 weeks.