UNITED STATES PATENT OFFICE.

HARRY L. HAAS, OF NEW YORK, N. Y., ASSIGNOR TO THE ZUCKER & LEVETT CHEMICAL COMPANY, OF SAME PLACE.

POLISHING COMPOSITION.

SPECIFICATION forming part of Letters Patent No. 331,632, dated December 1, 1885.

Application filed October 24, 1884. Serial No. 146,397. (No specimens.)

To all whom it may concern:

Be it known that I, HARRY L. HAAS, a citizen of the United States, residing in the city and county of New York, in the State of New York, have invented certain new and useful Improvements in Polishing Compositions; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates more particularly to polishing compositions designed for use in preparing buffers or buff-wheels for polishing; but it may be used on other devices employed for that purpose. Polishing compositions for that purpose require two apparently inconsistent qualifications—first, that they should adhere tenaciously to the buff, so as not to be too rapidly dissipated by the quick revolutions of the buff and the friction incident to polishing, and the other that they should not adhere tenaciously to the work polished, but be readily removable therefrom. In addition to these, they must also be cheap, in order to be used practically. Polishing compositions as heretofore made for such purposes have generally consisted of tallow or similar fats as a base, into which have been worked polishing materials—such as emery, tripoli, crocus, rouge, or other polishing materials, or a mixture of such materials—and then the composition has been formed in molds or frames, the stick form being one of the most convenient shapes for use. Such composition is held to the polishing device while in motion until enough has adhered thereto for the purposes required. Such combination forms a convenient compound for holding together the polishing materials and causing them to adhere to the wheel. The principal objections to these compositions are the expense of the base and the difficulties in getting such compositions out of the depressions and interstices of the articles polished thereby. I have for a long time been engaged in making investigations and experiments with a view to finding something that will not be open to these objections, something that will be cheap, capable of being readily used, adhesive to the buffer, and also readily cleansed from the work that is polished. I have found that tar alone, or with oils, or with stearic acid or other of the hard fats, used in combination with polishing materials, produces a polishing composition that can be cheaply made and easily removed from the articles on which it is used.

The best way to prepare my composition is to take tar—coal-tar is as good as any, and is cheapest; but I have found all kinds of tar to give good results—and warm or heat it in a suitable vessel until it is of such consistency that the polishing materials can be readily incorporated with it, and then work in any such materials that may be desired. I have found the composition so made to be very adhesive to the wheel, being more tenacious than other compositions now in use, which is a great advantage. I have also found that for some reason, but what I am not certain, although I believe because of the ready volatility, under friction, of some of the constituent elements of tar, portions of the composition adhering to the work after polishing are very easily removed, and that the work presents a brighter and more attractive appearance than when any of the compositions heretofore in use have been applied. I have also found that this desirable property of the tar is to some extent communicated to a mixture of tar and fats; that a composition, say, of two-thirds tar dissolved in one-third oil or of two-thirds tar dissolved in one-third tallow, stearine, stearic acid, or other of the solid fats, heated, with the polishing materials added, will produce a composition that will be quite as good as when the tar alone is used, and for some purposes even better. A larger or smaller proportion of the oils or fats may be used, if desired; but I have found that the proportions indicated produce the best results for general work. By such a combination I am therefore enabled to produce a composition of the consistency of tar, and if a softer composition is desired I can produce that by the addition of oil to the tar to bring to the proper consistency. On the other hand, if a composition harder than tar is required, I add some of the solid fats.

The softer compositions may be packed in boxes or any suitable vessels, and the harder

forms may be pressed or molded into any desired shape.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A polishing composition consisting of a base or vehicle of tar, in combination with suitable polishing materials, substantially as described.

2. A polishing composition consisting of a base or vehicle of tar, in combination with fatty substances and polishing materials, substantially as described.

HARRY L. HAAS.

Witnesses:
ALEXANDER LEVETT,
CHAS. LOEB.