Manuscript text:

Notes dated 20 June 1851 by E. S. Hughes, “R. D. Benton’s Recipes in the Daguerreotype Science.”

Original line breaks preserved. Included in the manuscript text is additional text, “The Way to make Money.”

[first page]

South Wales  June 20  1851  E. S. Hughes
R. D. Benton’s Recipe’s in The Daguerreotype Science  Copied from G. H. Wolcott

To Clean Plates
First turn the edges then brush off the dust, burn over an alcohol lamp. Then clean with rotten stone and prepared wash. Then Buff

To make wash for cleaning Plates
1/3 Alcohol  1/3 water  1/3 Spirits ammonia

To make guilding  Take 1 1/2 pint water 1/2 in 1 bottle and 1/2 in another bottle  1 bottle gold  1 bottle  40 grains of hyposulphate of Soda in another. When dissolved pour the gold solution into the other to be filtered before use

[second page]

To make a wash to absorb coating
Take 1 Teaspoonful of hyposulphate of Soda in 1/2 pint of water ___________________

To mix quick battery  take 1/4 pint water put 1/8 bottle quick. if it works to fast add water if slow add quick  ____  ____  ___

E. C. Hughes, “Recipes in the Daguerreotype Science,” 20 June 1851
(keywords: E. S. Hughes, R. D. Benton, G. H. Wolcott, Recipes, history of the daguerreotype, history of photography)
To Coat Plates
Coat over to straw color over quick gold color, then over iodine to violet color, which will be about 1/3 as long as first ___ ___ ___

To Clean gilded Plates
Clean with Spirits Turpentine and rotten
Then burn them clean as other plates ___

To Make Adhesive Paper
Take gum arabic & izing glass equal parts
dissolve in water to about the condition of varnish. Then put it on with a brush
2 coats is the best

To Make Quick
Take 1 pint lime water 1 oz bromine. 3/4 oz chloride of Iodine. To every oz of quick add 10 or 12 drops of clorine ___ ___

To make Chloride of Gold
Take pure gold dissolve in crucible with 1 part nitric and 2 parts muriattic acid
When dissolved to every part of gold add 1/2 drachm of rock salt. Dissolve in water then vaporate until dry. 30 grains of Gold will make 1 bottle.

To Make Silver Solution
Cut the silver with nitric acid then percipitate with common salt. Then was until you can neither taste the salt or acid. Then dissolve enough potash in water to take up the silver which will be about one oz to 2 shillings silver.

The way to make money
Call every man a D—— fool that insults you and show your impor-
tance and independance in every and any place. Always appear cheerful whether up or down hearted and you will finnally humbug the world and make money every time.

Shakespere ______

L. L. Treat's Esq Recipes

For making quick take one quart of lime water, add to it one oz Chloride of iodine then add enough bromine to take up the iodine and about 1/2 a teaspoonful more of bromine

[sixth page]

Liquid Quick  Coat over Iodine to a deep yellow, then over quick to a light red— then over iodine from 1/4 to 1/6 as long as at first

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Dry Quick

Take lime just slacked one pint. dry it on a plate of iron or on a stove, and when cold put it in a ground stopper bottle and add a few drops one oz of bromine a few drops at a time shaking well after each addition. Directions for using Spread about a teaspoonful over the bottom of your box. Coat over iodine to a light yellow. Over quick to a light red and recoat from 1/4 to 1/6 over iodine. Your battery will need strengthening every morning.

[seventh page]

For making gold solution Take 1/2 pint rain water add 1 teaspoonful of hyposulphate of soda next take 1/2 pint rain water add 1 bottle of gold after dissolving pour the gold solution into the soda then shake & add a teaspoonful of pure fine salt then filter it. ______________

To Make Bleeching Solution Make a saturated solution of muriate of ammonia (sal ammoniac) in pure rain water and filter it through paper reduce with
an equal quantity of rain water when used. When the
[illeg.] or any part of the impression is badly
solarized after removing the coating rinse
with water then pour this upon the surface
in same manner as the guilding pour off with
out rinsing. Then apply the guilding. The whole operation
must be quickly done or the Chloride soon attacks
the shades of the picture ____  ____  ____

[eighth page]

Chloride of Gold

Take $500 [$5.00?—ed.] worth of gold
dissolve in nitro muriate acid and evaporate
to dryness before getting dry add some water and
evaporate most to dryness when add a tablespoon-
ful of common salt then bottle it ————

John Roach's Quick

After your liquid
quick stands 3 or 4 months in the bottle
add 10 or 20 drops of bromine ____

South Wales June 20 1851

[End of text.]
South Wales June 2d 1851 C.B. Hughes
Re: O. Bentham
Receptor of the Daguerrotype Science
Copy from C. D. Hinds
To Clean Plates
First run the edges then brush off the dust, then over an alcohol lamp. Then clean with rotten stone and prepare wash thin.
BUFF To make wash for cleaning plates
1/2 Alcohol 1/3 water 1/8 spirits ammonia

To make gilding mix 1/4 pint water
1/4 bottle arsenic, in another bottle of bottle
1/2 bottle. 40 grains of hyposulphite of soda in another. When dissolved pour the gold solution into the other to be filtered before use.

To make a wash to absorb coating
Take 1 tablespoon of hyposulphite of soda in 1/4 pint of water
In 1/2 pint of water
1/2 bottle quicksilver 1/2 pint water
Put 1/2 bottle quick if it moves too fast add coats of slow acid quick

To coat Plates
Coat over to straw color over quick gold color. Then over straw to violet color, which will be about 1/5 as long as at first.

To clean gilded Plates
Clean with spirits turpentine and cotton. Then burn them clean as other plates.

To make adhesive paper
Take gum arabic and sizing glue equal parts.
Dissolve in water to about the condition of varnish, then put it on with a brush. 2 coats is the best.

To Make Quick
Take 1 pint lime water 1 oz. brimstone, 9 oz. chloride of baryta. To every 1 oz. of quick add 10 or 12 drops of chlorine.

To make Chloride of Gold
Take pure gold dissolve in nitric acid, 1 part nitric acid and 2 parts muriatic acid. When dissolved to every part of gold add 1 grain of rock salt. Dissolve in water. Then evaporate until dry. 30 grains of gold will make 1 bottle.

To Make Silver Solution
But the silver with nitric acid, then precipitate with common salt. Then wash until you can neither taste the salt nor acid. Then dissolve enough precipitate in water to take up the silver which will be about one to 20 of pure silver.
The Way to Make Money

Tell every man and woman that results you and show your importance and independence in every place. Always appear cheerful. When up or down, success and your will invariably bring you luck and make money every time.

Shakespeare

Liquor Quick

Boat over baking to a deep yellow, then over quick to a light red. Then I over bake from 5 to 6 as long as first.

Dry Quick

Take some just standing one point, dry it on a plate off iron or on a stove, and when cold put it in a gumma stopper bottle and add one drop. One of bromine a few drops as a thin shaking with after each addition.

Directions for using: spread about a teaspoonful over the bottom of your box. Coat over baking to a light yellow, over quick to a light red and repeat from 5 to 6 over baking. Your battery will need strengthening every morning.
For making Sulfuric Solution take a pint rain water, add 1 tablespoon of Hyposulphate of Soda, next take a pint rain water, add 1 bottle of gold, after lightening pour the gold solution into the Soda, then shake & add a teaspoonful of pure from salt then filter it.

To make Bleaching Solution make a Saturated Solution of Muriate of Ammonia (Sal-ammoniac) in pure rain water and filter it through paper resewed with an equal quantity of rain water when used, when the linen or any part of the impression is badly colored first after removing the coloring matter with warm water pour this upon the Surface in same manner as the quilling pour off with anหวัน, then apply the quilling, the whole operation must be quickly done as the chloride soon attacks the shades of the picture.

Chloride of Gold take 8.500 parts gold dissolve in nitric Muriate acid and evaporate the arsenic before adding any water and evaporate most to dryness when add a tablespoonful of common salt then bottle it. John Beach's Dwell after pouring liquid quick stand 3 or 4 months in the bottle, add 10 or 20 drops of brown ink.

Dorothy Molees June 26 1858