Some Things You Should Know About

• Inks and Adhesives

Courtesy of
Sanford Manufacturing Company
Chicago · New York

Some Things You Should Know About SANFORD'S Inks and Adhesives

Strange as it may seem, some of the things all of us use every day are the very things we really know little or nothing about. ¶We dip our pens in a fluid called ink. ¶We reach for our paste jar or mucilage bottle. ¶We use these things week after week, year in and year out. ¶They are our faithful servants; two of the important working tools of business; and yet we seldom stop to ask a single "What" or "Why" about them. ¶This book tells you the interesting story of inks and adhesives; a story which has run through every chapter in the history of mankind for thousands and thousands of years.

There is no substitute for quality

Sanford Manufacturing Company

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IN THE BEGINNING

DEEP in a rocky cavern in Southern France, a group of archeologists, recently discovered the relics of a pre-historic civilization,/thousands of years old.

Here were traces of domestic life under conditions which it is difficult for the modern mind/to conceive and yet, deep in the rocky walls of their cavern home, these pre-historic people signaled to the future/their superiority over the wild beasts among which they lived, exercising that attribute which man alone possesses—the desire and/ability to record his activities—by scratching, into the rocky walls of their homes, pictures of the very beasts they//were forced to battle with for existence.

Thus, we see that as far back into the past as we can/reach, man has had the urge to record the events of his life.

Among the ancient Egyptians, writing on paper/with colored fluids advanced to a high state of perfection, and that they had discovered a remarkable formula for the/prep-

A ROMAN SCROLL

aration of these writing fluids is attested by the fact that their writings are still legible and readable today.

The/art of writing, as practiced by the Egyptians, was duplicated by many other peoples, although in the main, such great// civilizations as were developed by the Babylonians and others, depended more upon carving for the recording of historical events than/on writing.

Somewhere between the civilization of Egypt and the "Glory that was Rome" the art of producing chemical writing/fluids was lost because the Romans did not use them but, as is recorded by Cicero, depended upon the rich,/ brown excretion of the Cuttle or Devil Fish for their writing fluid.

There is no historical mention of modern ink/until the eleventh century and the first manufacturer of whom we have any record was a Frenchman—M. Guyot—who//made and sold ink in Paris in 1609.

EGYPTIAN INSCRIPTIONS

The Chinese, whose civilization probably runs even farther back than the Egyptians,/ were great writers, great recorders of events, but they did not use either the Egyptian fluid or the Cuttle Fish/ink of the Romans.

Chinese inks are, in the main, built up from lamp black and gum solutions and really/ should be classified as paint rather than as ink. In fact, Chinese writing is but a series of pictures done/with a brush.

Volumes could be written regarding writing but let us come down to the present and examine the//contents of our own ink wells.

Let us learn all about this essential working tool, this medium whereby we express/ourselves and through which we hope to leave an imperishable record of our daily lives.

Few suspect that wasps, oak/trees and iron mines have anything to do with the contents of their ink bottles, but without the wasp, the/ oak tree and the iron mines we could have no ink such as Sanford's Blue Black, Imperishable Writing Fluid.

A CUTTLE FISH

Far/away on the shores of the Mediterranean among the groves of ancient oak trees which cover the hills, a wasp,//resembling our native horsefly, lives and has lived generation after generation for thousands of years.

The female of this insect/bores into the small branches of the oak trees, deposits her eggs within the wound and the oak tree walls/off the egg of the wasp with a peculiar wart-like growth called a "Gall."

These galls develop into globular growths/about the size of an acorn, the larvae of the wasp develops within and eventually eats its way out and/becomes a wasp.

Modern ink makers gather these galls, grind them, soak the powder in great vats and thus secure//a solution of tannin, one of the basic fluids for the production of ink.

So you see modern ink makers/go back to the ancient birth place of writing for the essential ingredients in modern writing fluids.

And now we/must go deep down into the

A MEDITER-RANEAN WASP

ground for another essential element in ink making.

We must drop down hundreds of/feet into the iron mines of the world and from this iron secure a salt known as copperas.

Finally, if/we mix the tannin distilled from the galls with the proper percentage of iron salts and water we will produce//ink, but our solution would be practically useless as a writing fluid.

In the first place, a simple solution of/Tannin, Iron Salts and Water will not adhere or cling to any pen point; in fact we could not write/more than a few words at a time with such a fluid.

So away to India or Arabia we must/go for Gum Arabic, a product of the Acacia tree, which, when mixed in proper proportion with our basic ink/solution, gives the required viscosity, or in other words makes it possible to dip a little globule of fluid from//the ink well which will adhere to the pen point and yet flow freely when the pen is placed in/contact with the paper.

A CHINESE BRUSH-WRITER

The producing of the necessary viscosity in ink is a most delicate operation, requiring years of/experimentation and experience to secure satisfactory results.

Having solved the problem of making our ink adhere to the pen point/and at the same time flow freely we must now insure the permanency of what we write.

Unless we do/this our ink will simply dry on the surface of the paper and could be wiped off with a wet//cloth or lifted from the sheet with a damp blotter.

This of course would never do and so we must/blend certain acids with our basic ink solution so as to set the words, figures or signatures we write permanently/and indelibly into the paper.

Finally, we must take one more step before the contents of our ink bottle will/be truly satisfactory.

Our solution of Tannin, Iron, Water, Gum Arabic and Acids will be practically colorless

FOUNTAIN PEN INK

and we could/scarcely see anything we might write with it.

Therefore coloring matter in the form of aniline dyes must be added//and the most popular and pleasing color is blue.

With these facts before you, the manufacturing of ink may seem/to be a very simple process but just as many other manufacturing processes seem to be simple, superiority in the/manufacturing of ink can only come as the result of painstaking effort.

It is true that the very same galls/which we travel halfway round the world to get can be found in other parts of the globe, but for/some reason the quality of the tannin produced from other galls is not equal to that secured from those of//the Mediterranean.

Again, it has been found that galls from which the larvae of the wasp has not escaped are/superior and there is a vast difference in the quality of iron salts.

NUT
GALLS

Furthermore, without the skill of chemists, supplemented/by years of experience, superiority can hardly be hoped for.

Therefore, in the modern ink factory, the chemist is a/most important factor.

In his laboratory, with mortar, pestle, scale and test tube, proportions to the smallest fraction with the/result that by mixing just the right percentage of pure water and other quality ingredients, a perfectly pure ink, free// from foreign matter of any character—an ink which will flow smoothly from the pen or through a fountain pen/—an ink which writes a beautiful, pleasing blue and later turns jet black and thus remains as long as the/paper on which it is written, is produced.

This change from blue to black, by the way, is due to/oxidation, the action of the air or oxygen in the air on the combination of tannin and copperas or the/very same action which takes place when silverware is exposed to the air for any length of time. In other//words

COLORED
INK

the solution dries on the paper, turns jet black when the aniline dye fades away and our records remain/in permanent black.

And so you see it is well when purchasing ink to consider carefully the importance of the/ three-quarters of a century of ink making experience which Sanford Manufacturing Company has had.

In addition to the popular blue-black/ink, jet black inks are of course available and there are also various colored inks, but it should be remembered/that these red, green, violet and others have not the permanency of the Gall and Iron Solutions.

So much depends//on the quality of ink used in business that it behooves every one who is or expects to be engaged/in business to know just where they can go for a safe dependable source of supply and we therefore, conclude/ our story of ink by recommending that—"When folks say ink, it's wise to think—of SANFORD."

Adhesives

FEW people stop to think, as they reach for their convenient jar of clean, sweet smelling Library Paste, that but/a few short years ago practically the only adhesives available were the coarse, often mal-odorous glues, made from the clippings/of animal hides, hoofs and horns; with the possible exception of the makeshift mixtures of flour and water with which/most of us are still familiar.

In 1892 Sanford Manufacturing Company, realizing the demand for a clean adhesive which would/not have to be melted or cooked every time it was needed, as was and still is the case with//practically all animal glues, began to experiment and finally produced the first and original Library Paste.

The basis of Sanford's/Library Paste is a flour specially prepared for Sanford's and the product of the potato plant. While Ireland is known/as the home of the "Spud", America grows more potatoes than any other country in the world and, consequently, there/is more of this potato flour made here than anywhere else.

With Dextrine as a basis the chemist produces a/compound which, in its original state flows almost as freely as water but gradually

LIBRARY
PASTE

sets into a heavy gelatinous mass//as you find it in your paste jar.

Under ordinary conditions, especially in the famous Sanford Water Well Jar, Sanford's/ Library Paste will remain in a gelatinous state for a long time and even if it does harden it can/be restored to practically its original state by simply adding a little water.

For all practical purposes either in the/ office, the shop or the home Sanford's Library Paste is the ideal adhesive.

It is always smooth and free from/any grit. It spreads smoothly and evenly and sticks quickly, holds permanently and it never sours.

Finally it is packaged//in jars of various sizes to meet every requirement and in this connection the new flexible tube containers have proved/to be most popular for office and home use.

For those who prefer a freer flowing adhesive Sanford produced a/complete line of conveniently packaged Mucilages.

Mucilage is produced from vegetable gums

such as Gum Arabic, Gum Senegal and other/ excretions from plants and trees.

Then there is the semi-liquid paste called Flo-gum, a high grade adhesive if one is/ satisfied with a semi-liquid rather than a real paste or a gum mucilage.

Proportions must be studied with the greatest/care and lengthy experiments conducted to produce mucilages with just the right consistency, adhesives that will not crystallize in the/bottle and yet will stick and harden quickly when used.

So you see that there is a world of work/ packed into a jar of fine paste or a bottle of mucilage. There are products from far off lands and/last but not least there are years of experience that mean even more than quality in the materials.

Be wise//therefore and when you buy adhesives look for the name Sanford as a guaranty that you will get more for/your money—Satisfaction guaranteed by three-quarters of a century of service.

SIX
BRILLIANT
COLORS

SOLVENE
TYPE
CLEANER

IT IS INDEED a far cry from the crude characters which pre-historic man carved so laboriously into the rocky walls/of his cavern home, in an attempt to record the outstanding events of his life, to the modern typewriter with/which we of today carry on all manner of social and commercial affairs.

It is indeed difficult to imagine what/the world and particularly the business world would be without the typewriter and its worthy ally Stenography.

For more than/seventy-two years Sanford Manufacturing Company has been interested in writing. For three-quarters of a century we have been working diligently//to improve Sanford Inks in order to make writing pleasant and permanent and it was, therefore, most natural that we/should become interested in ways and means to further develop typewriting.

One of the troublesome little faults of the typewriter/develops from the fact that the constant striking of the sharp edged letters on the ribbon results in small particles/of the fabric and a certain amount of ink adhering to the type.

Sooner or later this dulls the edge/of the

type and as a result the characters cannot be clearly impressed on the paper.

Ordinary brushing does not//suffice to remove this film of ink and dirt especially from closed characters like a, b, e and s. A/solvent or solution which will dissolve the ink by chemical action is necessary.

Sanfords, with their years of experience in/ink making were naturally in a position to solve this problem and solve it they did with SOLVENE.

Solvene will/dissolve the accumulated dust, dirt and ink on any typewriter and it will do it quickly and completely without muss/or fuss.

You can get Solvene in the handy little desk tube or in 1½-oz., 3-oz. and 12-oz. bottles.

It's//a good thing to know about Solvene—It's a better thing to use it every day because "Clean Type makes/Clean Letters" and neatness is one of the keys to success—stenographic success.

SANFORD MFG. CO.

Manufacturers of INKS *and* ADHESIVES

CHICAGO Established 1857 NEW YORK