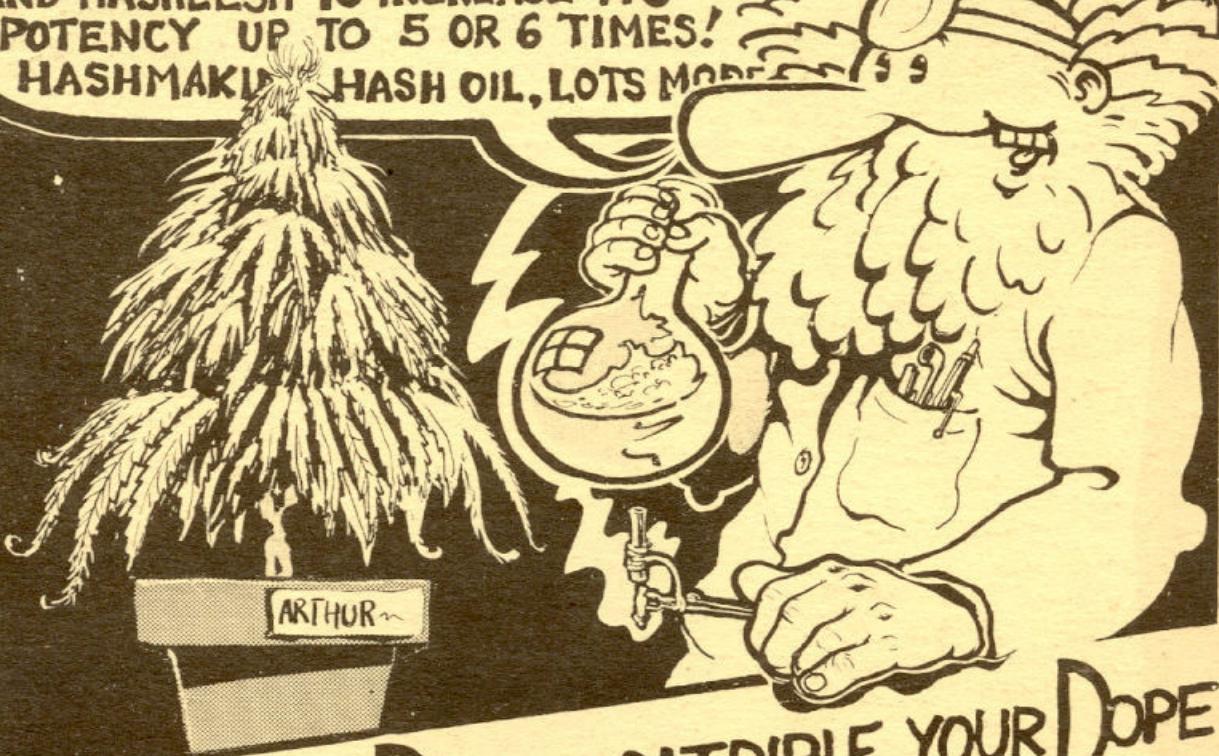


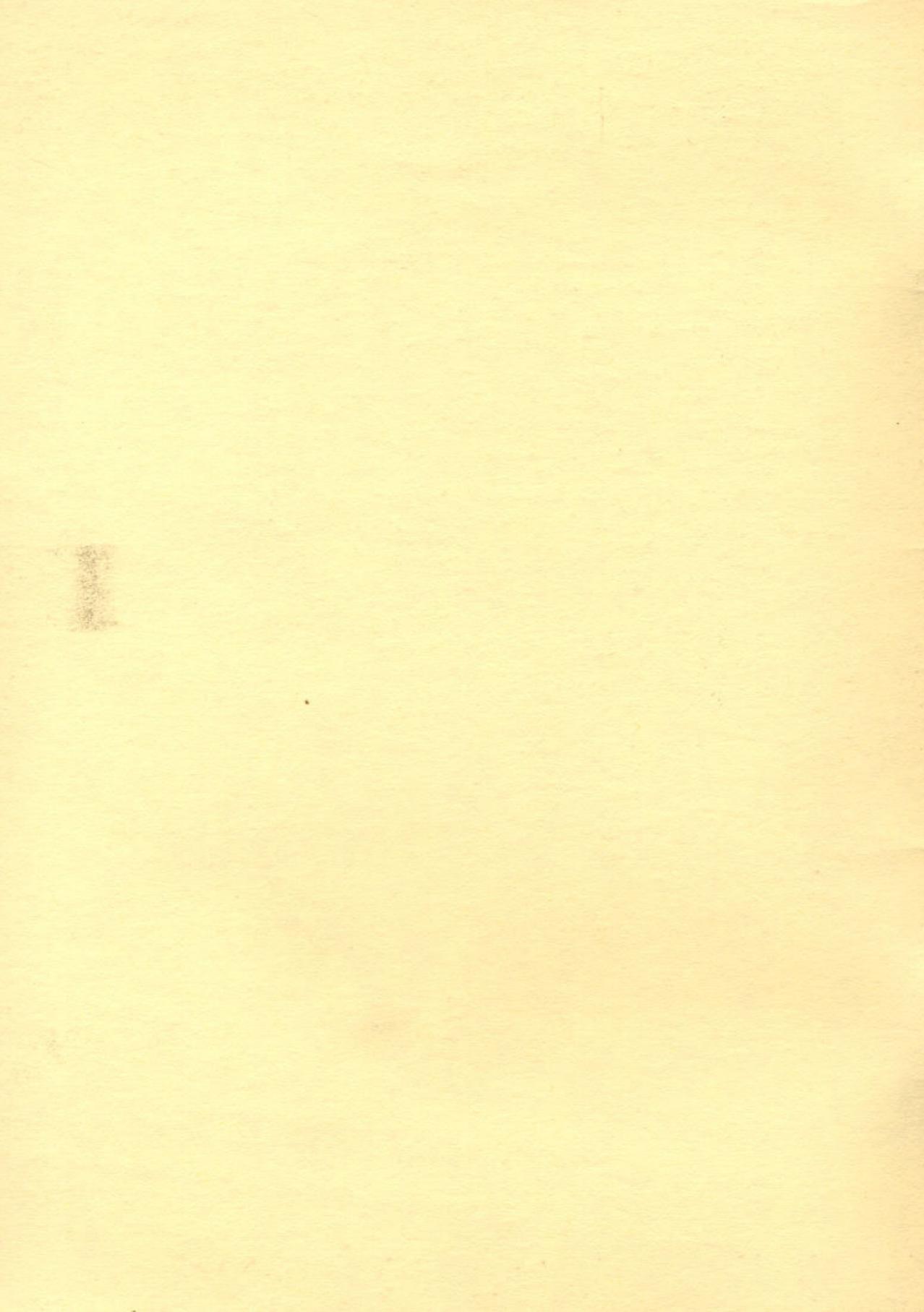
DR. ATOMIC'S MARIJUANA MULTIPLIER

ISOMERIZE YOUR MARIJUANA
AND HASHEESH TO INCREASE IT'S
POTENCY UP TO 5 OR 6 TIMES!

HASHMAKIN', HASH OIL, LOTS MORE

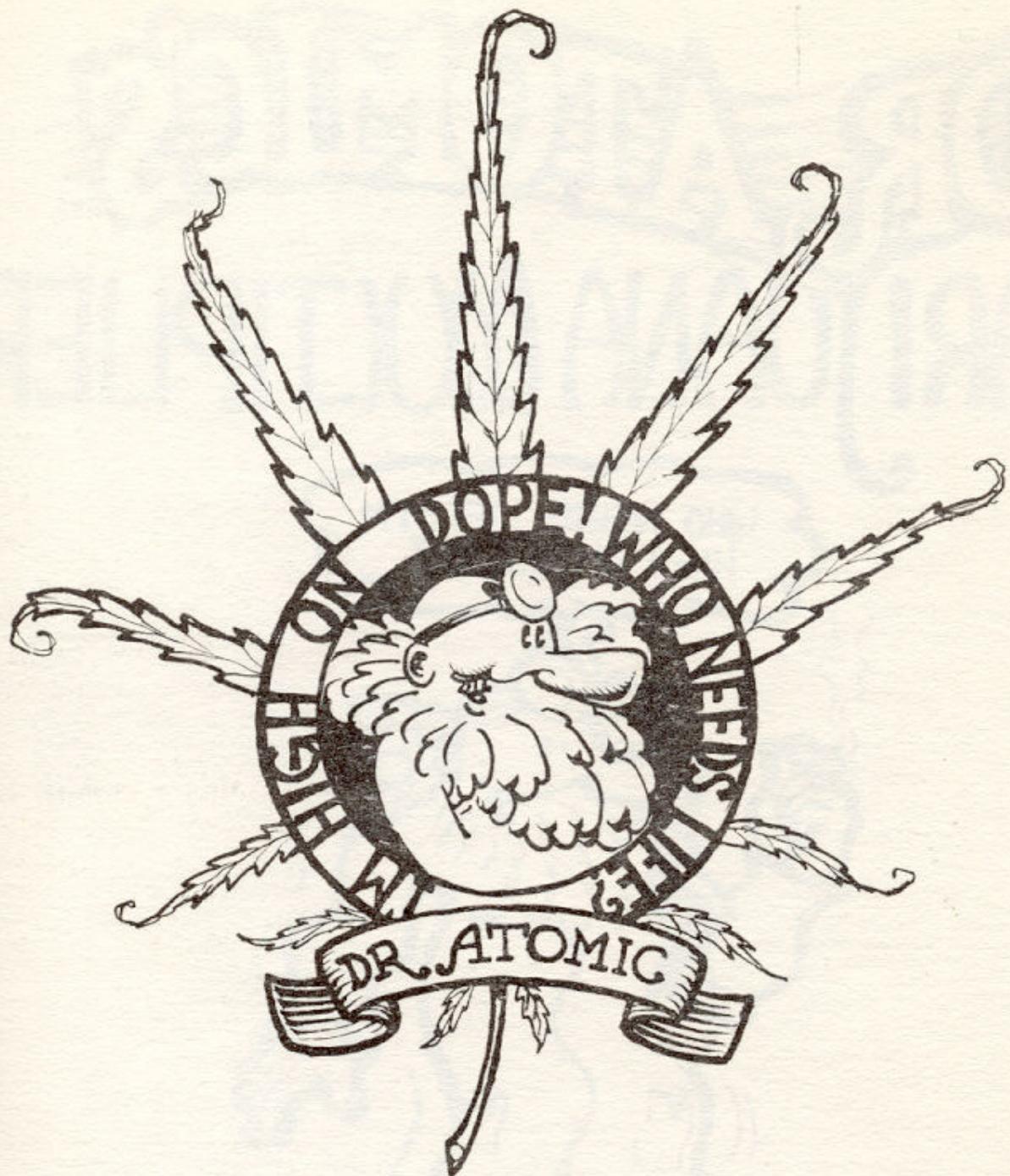


DOUBLE YOUR DOLLARS! TRIPLE YOUR DOPE



DR. ATOMIC'S MARIJUANA MULTIPLIER





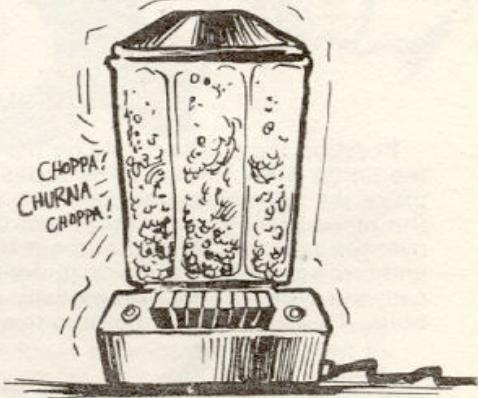
© 1974 BY LARRY S TODD
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Good afternoon, boys and girls, welcome to the Wonderful World of Dope! I'm your host, Dr. Atomic, and across the table from me you'll see today's guest, *Cannabis Sativa*! Today we'll be reviewing methods of making the dope you have into superweed *twice, three, or more times as strong* as it was when purchased. We'll also cover how to make hash, hash oil, Isomerization of Cannabidiol, and sundry other items of arcane pharmacopeia.



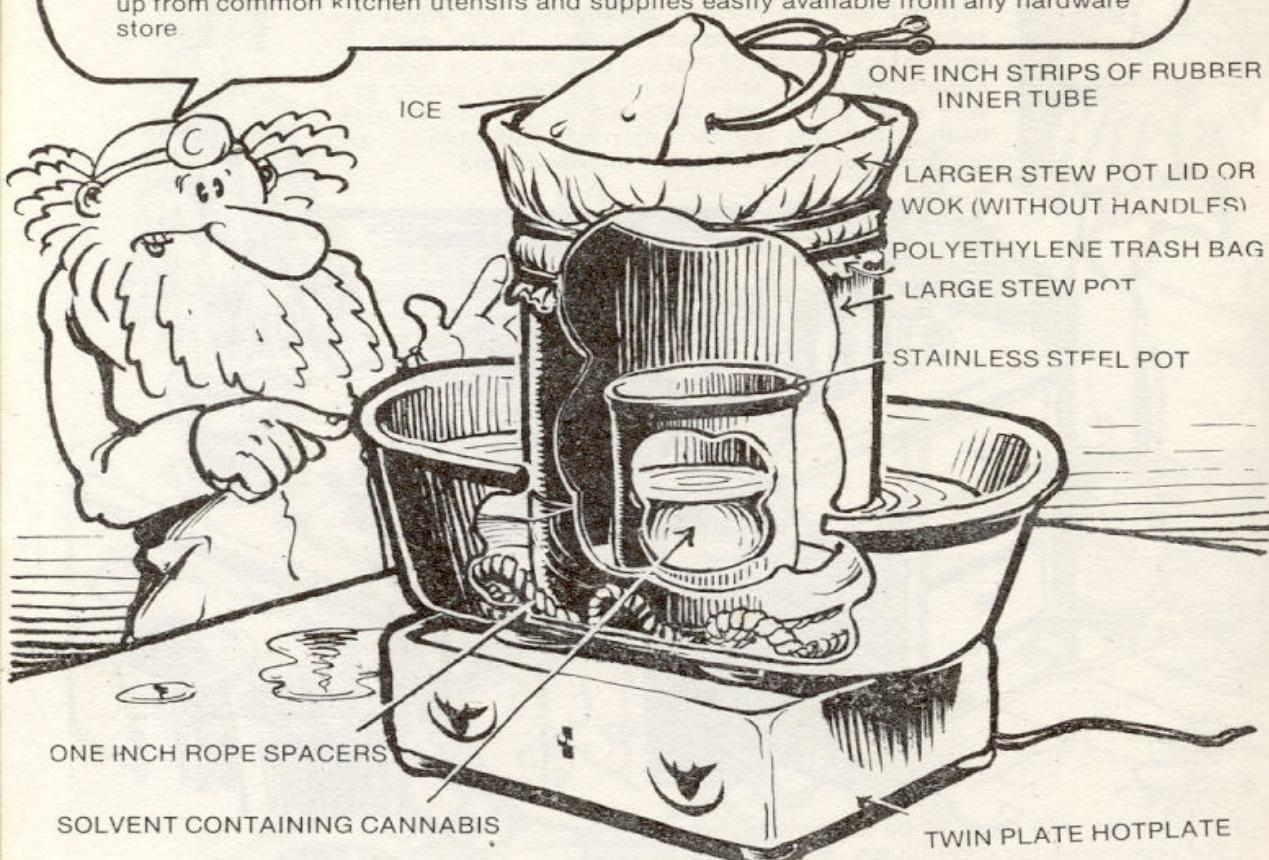
First, the dope to be extracted from must be processed for cleanliness. If marijuana is used, the seeds should be removed, though broken seed husks may be left in, as they contain some THC and virtually none of the harsh hempseed oils. The remaining material, leaves and stems, should be broken down as small as possible, though it might be possible to leave aside the best flowering tops for a process involving them. The material to be processed can be placed in a blender, with or without a solvent, and chopped up at low speed. Use of a solvent in the chopping operation will dissolve a maximum of the soluble resins in the first step.



Hasheesh should be broken up into small granules before being broken down; again, use of a solvent is recommended, as hasheesh is frequently quite dense, and if chopped dry in a blender, may show some tendency to jam or stall the blades. If the hash is hard, it can be cut with a sharp knife heated to a dull red glow in a gas flame. It may also be shredded on a cheese grater, or heated gently in an oven until it begins to soften. Powdered hash should not be left exposed, as it will quickly lose its potency.

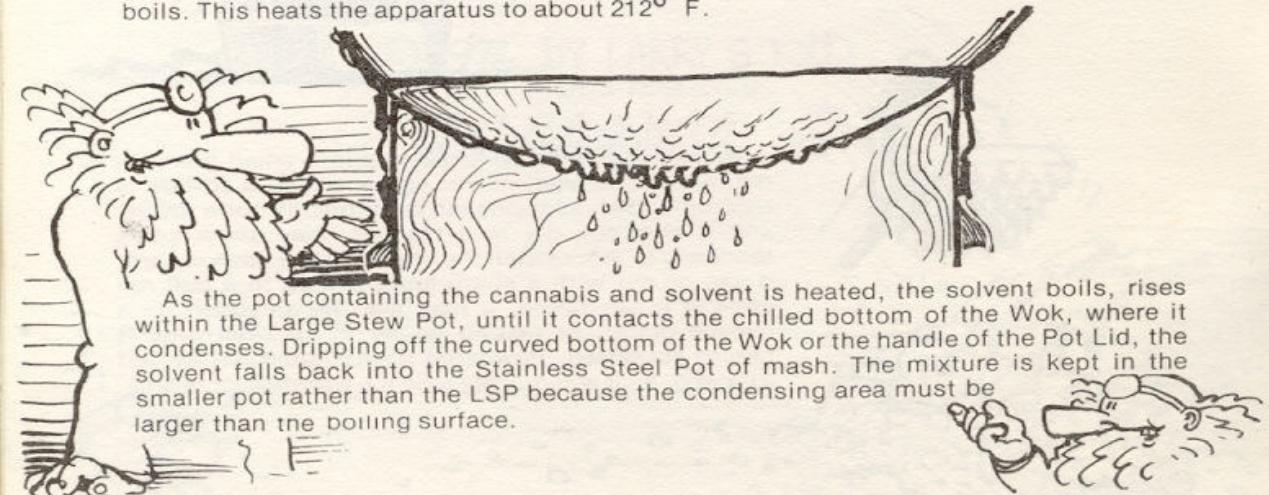


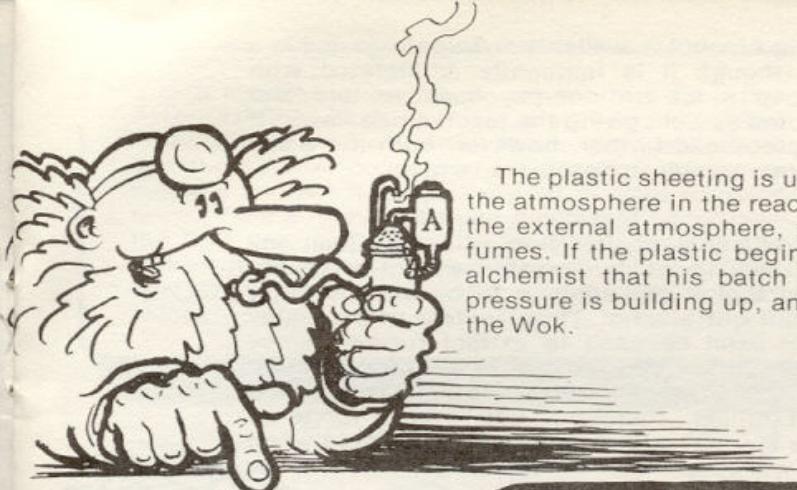
The next step is *refluxing*, using a solvent to extract the vital resins from the matrix material. Once all of the vital principle has been extracted, the solvent is removed and the resins are isolated. This refluxing apparatus is designed to build up from common kitchen utensils and supplies easily available from any hardware store.



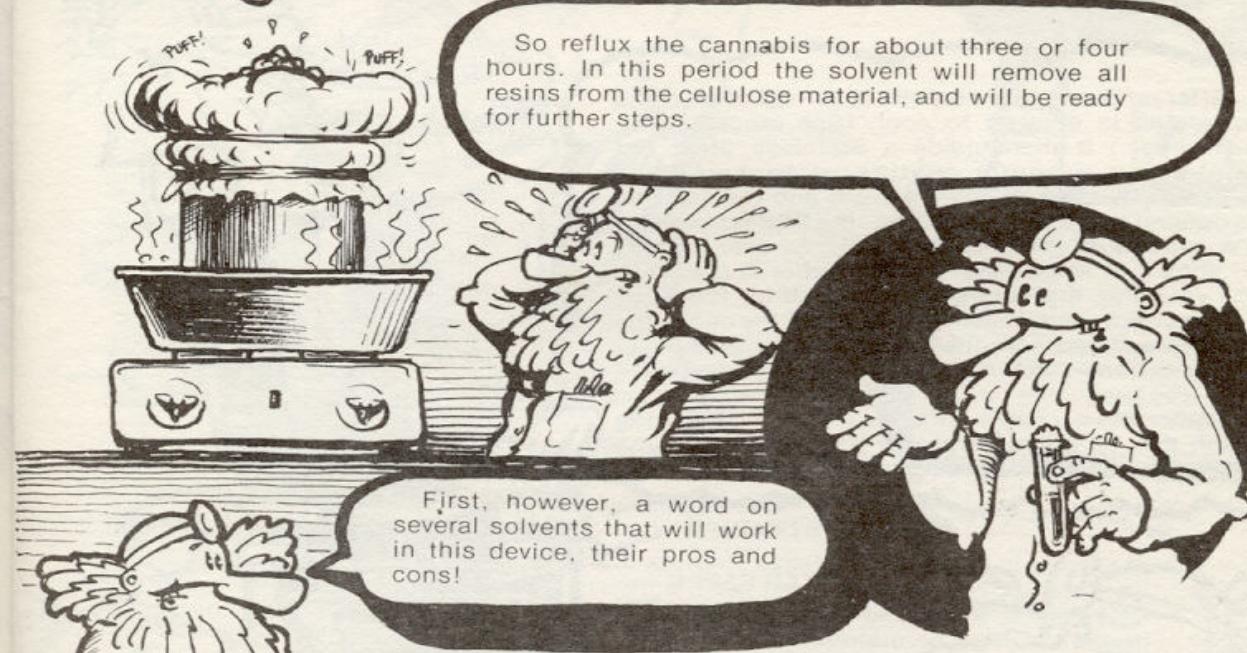
ASSEMBLY AND OPERATION

Position the tub securely on the hotplate and lay the rope strips inside. Then place the Large Stew Pot atop the ropes, place the Stainless Steel Pot inside the LSP and place the solvent/cannabis mash into the SSP. Secure the Larger Stew Pot Lid or a Stainless Steel Wok (without handles) over the LSP, then lay the Plastic Garbage Bag over the Wok (or LSPL). Fasten it tightly to the sides of the LSP with the rubber strips and force out all the air form under it with your hands. Pile much ice on the Plastic Bag over the Wok, fill the Tub halfway with water, and turn on the hotplate until the water boils. This heats the apparatus to about 212° F.

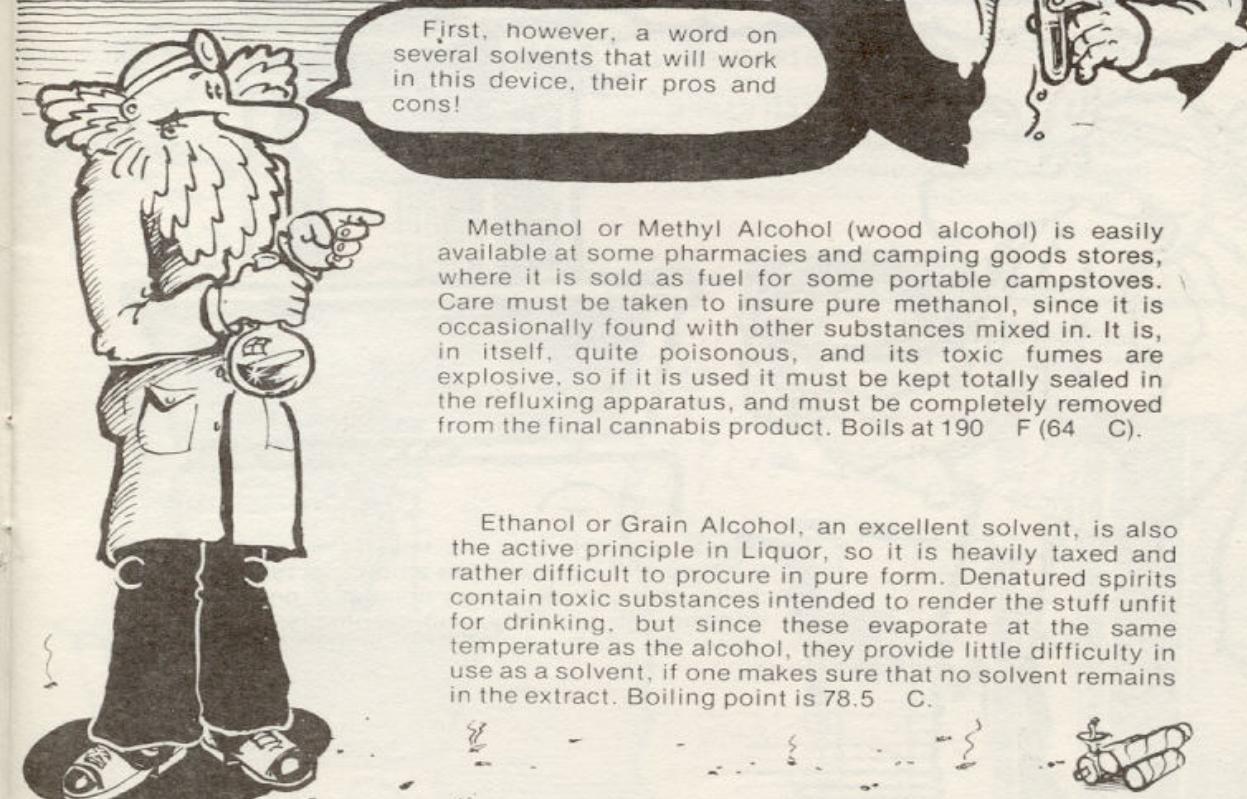




The plastic sheeting is used for several reasons. It seals the atmosphere in the reaction vessel completely off from the external atmosphere, preventing the leakage of toxic fumes. If the plastic begins to inflate, it is a sign to the alchemist that his batch is starting to get hot inside, pressure is building up, and more ice should be placed in the Wok.



So reflux the cannabis for about three or four hours. In this period the solvent will remove all resins from the cellulose material, and will be ready for further steps.



First, however, a word on several solvents that will work in this device, their pros and cons!

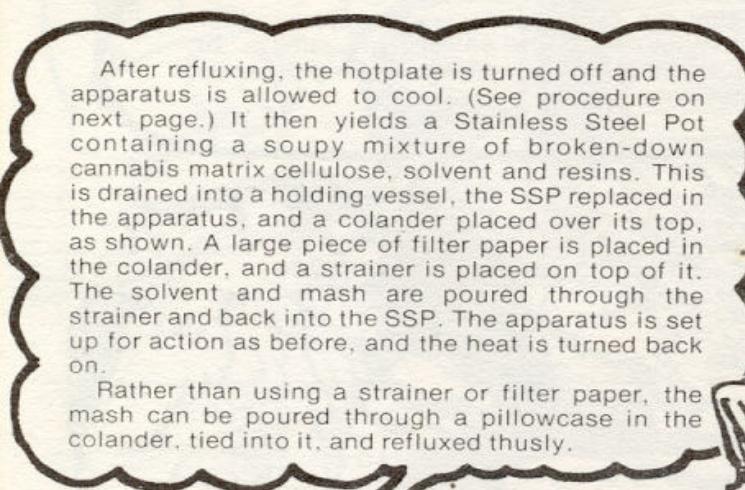
Methanol or Methyl Alcohol (wood alcohol) is easily available at some pharmacies and camping goods stores, where it is sold as fuel for some portable campstoves. Care must be taken to insure pure methanol, since it is occasionally found with other substances mixed in. It is, in itself, quite poisonous, and its toxic fumes are explosive, so if it is used it must be kept totally sealed in the refluxing apparatus, and must be completely removed from the final cannabis product. Boils at 190 F (64 C).

Ethanol or Grain Alcohol, an excellent solvent, is also the active principle in Liquor, so it is heavily taxed and rather difficult to procure in pure form. Denatured spirits contain toxic substances intended to render the stuff unfit for drinking, but since these evaporate at the same temperature as the alcohol, they provide little difficulty in use as a solvent, if one makes sure that no solvent remains in the extract. Boiling point is 78.5 C.



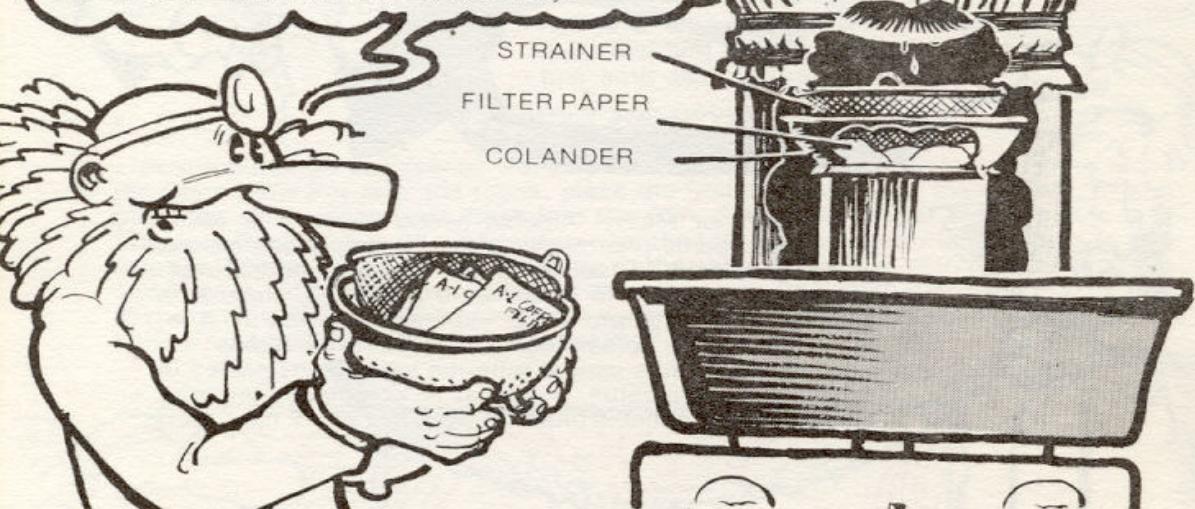
Isopropyl or Rubbing Alcohol is available at drugstores and is a satisfactory solvent, though it is frequently adulterated with water. This will cause a lot of non-psychoactive tars and flavorings to be extracted as well, giving the result a bad flavor. If the extract is to be processed further, however, both the water and such tars as it brings along can be removed easily.

Petroleum Ether produces a smaller yield of extract than any alcohol, but the extract is of far greater weight-by-weight potency. It is advised that if pet ether is to be used, a prior extraction be carried out with alcohol. Thus, far less of the highly explosive, toxic ether need be used to extract further. Since petroleum ether is a distillate product, its boiling temperature depends on what temperature and pressure it was cracked (fractionated) at. Pet ethers, therefore, boil over a range of temperatures, usually 30 - 60 °C. Ether must be ice cold when poured; some ethers will boil at room temperature.

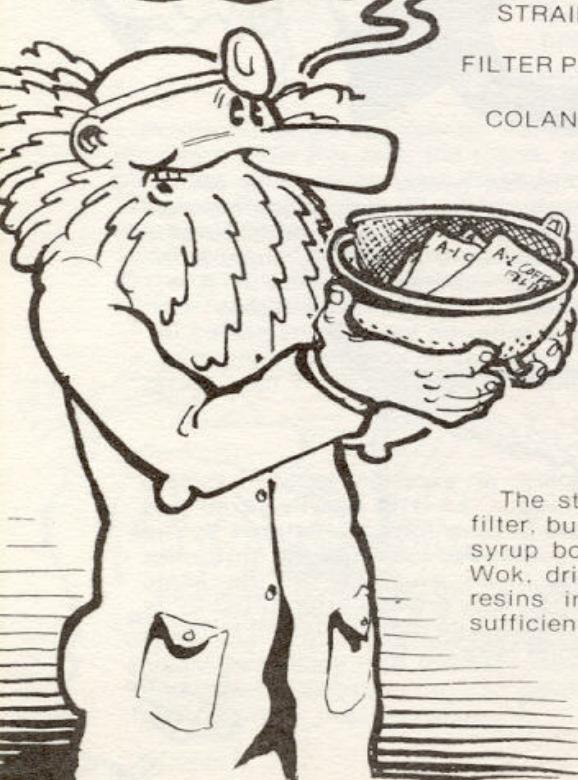


After refluxing, the hotplate is turned off and the apparatus is allowed to cool. (See procedure on next page.) It then yields a Stainless Steel Pot containing a soupy mixture of broken-down cannabis matrix cellulose, solvent and resins. This is drained into a holding vessel, the SSP replaced in the apparatus, and a colander placed over its top, as shown. A large piece of filter paper is placed in the colander, and a strainer is placed on top of it. The solvent and mash are poured through the strainer and back into the SSP. The apparatus is set up for action as before, and the heat is turned back on.

Rather than using a strainer or filter paper, the mash can be poured through a pillowcase in the colander, tied into it, and refluxed thusly.



STRAINER
FILTER PAPER
COLANDER



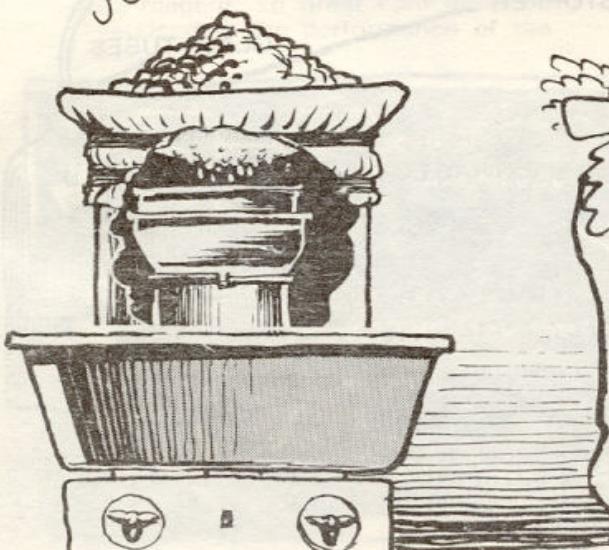
The stems and cellulose are held in the strainer and filter, but they still contain a fair amount of resins. As the syrup boils, the solvent fumes condense on the chilled Wok, drip through the filter, and eventually percolate all resins into the SSP. An hour's refluxing should be sufficient.

Now it's time to remove the solvent from the extract. After seeing that the apparatus has cooled sufficiently from the filtering phase, remove the filter and the strainer containing the leached marijuana material and put it away to dry. (It is used to make hash.) Take a round cake pan somewhat wider than the SSP and place it in the colander, leaving the solvent-resin syrup in the bottom of the SSP. Enclose the apparatus, and charge with ice, as before.



To cool the apparatus after using, it may be set into a nearby tub of ice and water, which will cool it down right away. A blanket kept soaking in this tub can be used as a fire extinguisher in case trouble develops.

Heat the apparatus, and the solvent, essentially pure, will collect in the cakepan in the colander, rather than running back into the SSP. An hour or two of this operation will provide a pan of solvent and an SSP containing *crude cannabis extract*. It should contain no solvent, though it may harbor additional substances or water which it might be desirable to remove.



Store the purified solvent! It can be used in later extractions!

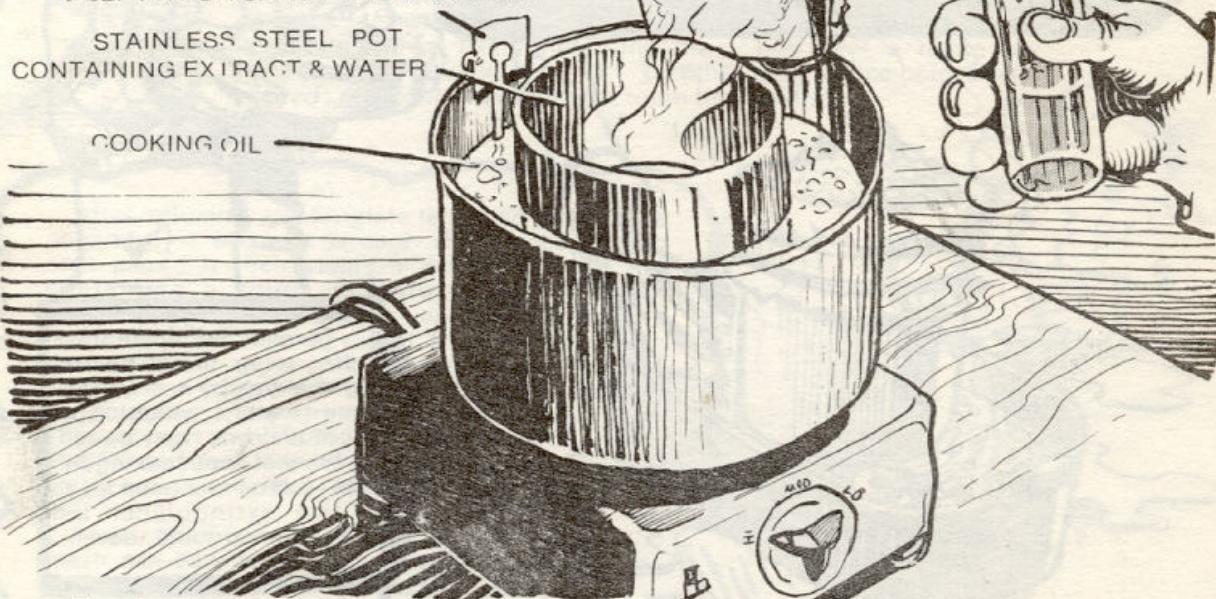


To remove the water that may be present in the extract, fill a large pot with cooking oil, place the SSP containing the extract into it, and clip a candy or deep-fry thermometer into the oil. If a toxic solvent has been used, place a bit of water in the extract and heat the oil to about 220° F. When a small mirror held over the SSP no longer fogs, all water will have been driven off, and all toxic chemicals as well, since they evaporate at a lower temperature.

DEEP FRY OR CANDY THERMOMETER

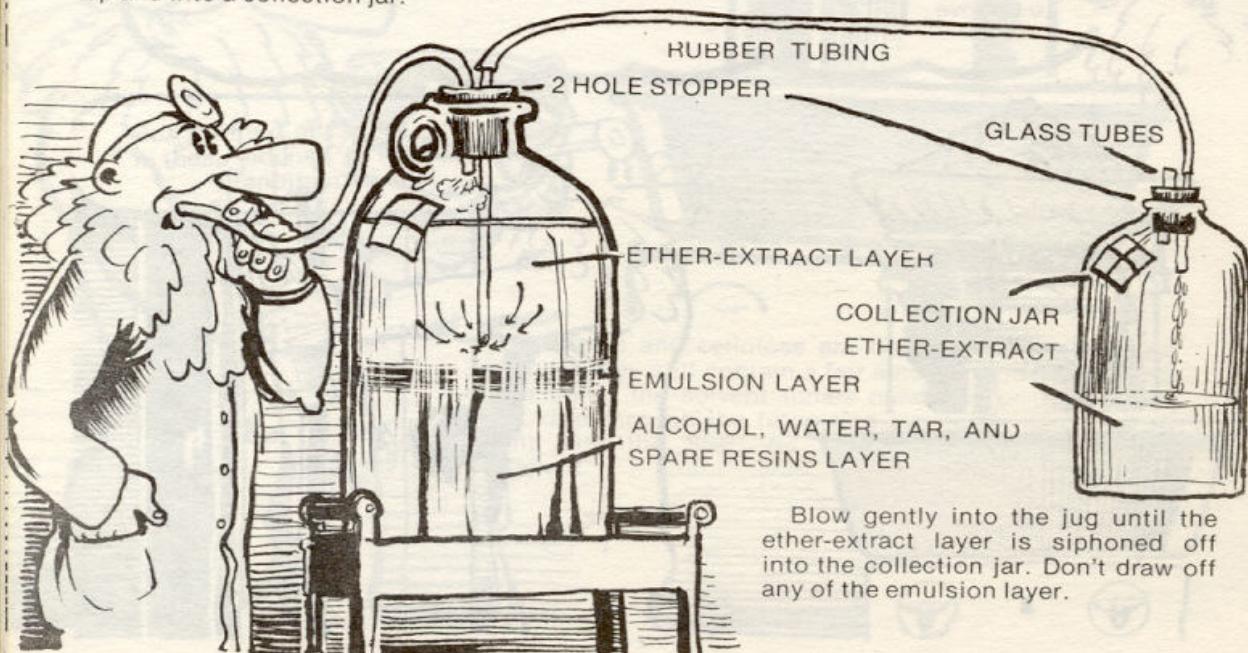
STAINLESS STEEL POT
CONTAINING EXTRACT & WATER

COOKING OIL



This yields an extract (Purified Crude Cannabis Extract) which is pure enough to eat or smoke, though it still contains substances which do not contribute to the high and can be removed from the resin.

Dissolve the Purified Crude Cannabis extract in five times its weight of alcohol, and pour with an equal volume of water into a large jar with a screw top. See sure that the mixture is not warm. Add a volume of pet ether to half the volume of water used, tighten the cap, invert the jar, then turn upright immediately. Let the mixture run down the sides of the jar for a moment, then uncap to relieve pressure, recap the bottle, and repeat. Do this about 25 times, then let the jug sit for about a half-hour and permit the contents to settle. It will separate into distinct layers, then the below apparatus may be used to blow the ether-extract layer off the top and into a collection jar.



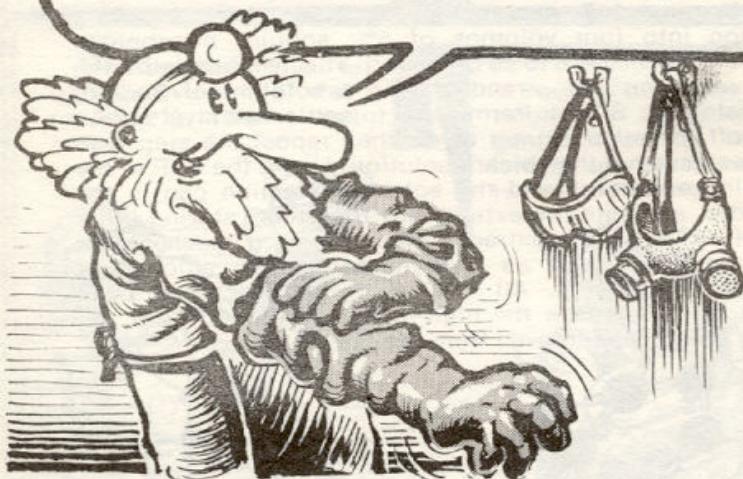
Blow gently into the jug until the ether-extract layer is siphoned off into the collection jar. Don't draw off any of the emulsion layer.



Add another volume of fresh pet ether and do it again, and repeat until the ether-extract layer is clear after settling.

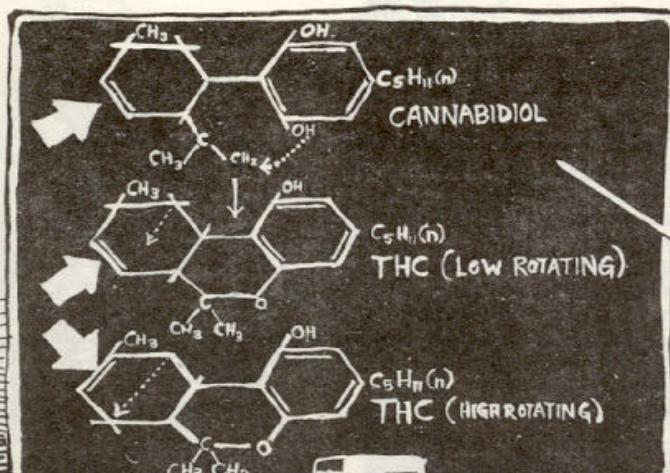
Now take all of this ether-extract solution and pour it into the SSP, position the colander and the cakepan on it, and put into the refluxing apparatus. Charge up with ice as before, and slowly heat to about 140° F. After evaporating the ether save it for later use, and place the pot containing the oil into a boiling water bath for a few moments to remove any residual traces of ether. The yield is much reduced from the initial steps, but the potency is far greater. This shall be referred to as *Purified Cannabis Extract* and is to be differentiated from *Purified CRUDE Cannabis Extract*.

TIME HAS COME TO GET INTO SOME LONG RUBBER GLOVES AN' GIT DOWN TO SOME NITTY-GRITTY CHEMISTRY! IT'S TIME TO ISOMERIZE CANNABIDIOL INTO THC AND CONVERT THE THC INTO AN ISOMER OF ITSELF WHICH IS FAR MORE POTENT!



The potency of extract which has been processed in this manner may at least be doubled, though in some cases it may be as much as five or six times stronger! This method, however, involves the use of pure, concentrated sulfuric acid, a dangerous reagent, so great care must be exercised in the performance of the operation.

The Purified Cannabis Extract contains several substances which yield the smell and taste; two non-psychoactive chemicals (cannabidiol and cannabidiol), of which cannabidiol yields the commonly known effect of the "munchies"; and THC (Tetrahydrocannabinol). Naturally, the more potent the hash or weed used is, the more potent the extract and the higher the level of THC. It is, however, possible to convert the Cannabidiol into THC, and to simultaneously alter the low-rotating THC present to the higher-rotating *Isomers*.



"Rotation" refers to the indicated double molecular bond and its position on the lefthand carbon ring. In Cannabidiol and THC (low rot) it is in a lower position; after isomerization it has moved to a higher position.



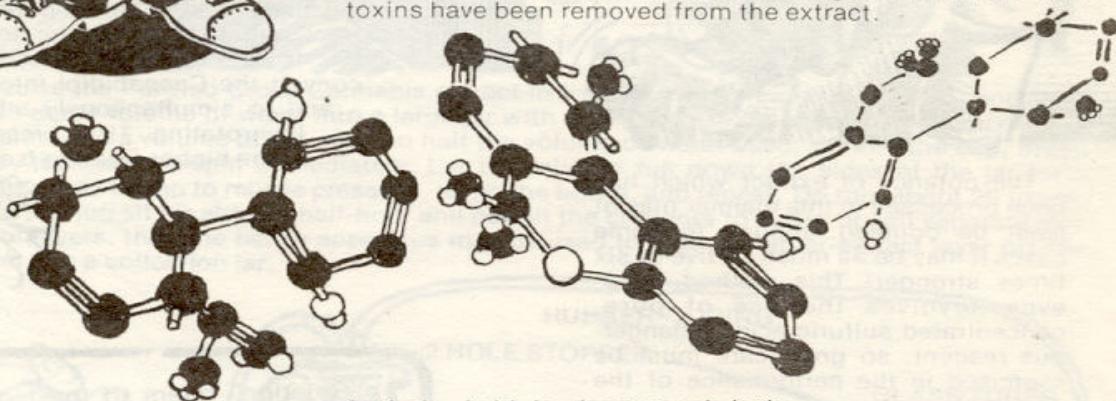


Dissolve the Purified Cannabis Extract in absolute ethanol or pure methanol in the ratio of one gram extract to ten grams solvent. There must be no water in this solution, as the next step is the addition of one drop of 100 % sulfuric acid per gram of extract. Add the acid slowly, drop by drop, stirring slowly and completely, with a long glass stirring rod.

Place a Pyrex pot containing the extract-alcohol-acid solution into the refluxing apparatus (using the Pyrex pot instead of the SSP, because of the reactive nature of the acid) and reflux for two hours. The acid will not evaporate and will remain in the Pyrex pot. Allow to cool.

Take the cooled solution, pour with an equal volume of water and 1/2 volume pet ether into the ether-extraction apparatus (pg. 6) and use as before. Allow to settle, blow off the ether-extract layer, and discard the water.

This leaves an ether-extract-acid mix from which the acid must be purged. To accomplish this, pour the ether-extract solution into four volumes of 5% sodium bicarbonate solution (1 gr. bicarb to 20 gr. water). This will neutralize the acid, releasing CO₂ and leaving a solution of Sodium Sulphate (Na₂SO₄). Permit this to settle into layers, then blow off the ether-extract layer, then repeat the step with pure water rather than bicarb solution. Using the SSP in the refluxing apparatus and the solvent-collection pan in the colander, separate the extract and the ether, storing ether for future work. The extract now contains a much higher percentage of THC, as determined by the amount of Cannabidiol present. All THC in this extract has been enhanced and is now the high-rotating isomeric form. All toxins have been removed from the extract.



Sulfuric Acid is dangerous! It is very strong, can cause severe burns, and even weak solutions thereof can cause your fingers to turn yellow. Never pour water into acid, for it will boil, spatter and throw acid all about.

When working with Sulfuric Acid (or any caustic or corrosive), always wear safety glasses, long rubber gloves, a rubber lab apron, and clothing that covers as much of the skin as possible. A face mask is also a good idea. In case of acid burns, have a bottle of bicarb solution on hand, as much bicarb as will dissolve in the water, and dash this instantly on any acid that contacts the skin. The acid should be kept in a tightly sealed reagent bottle in a styrofoam or polyurethane-foam lined box.



Dissolve the Purified Cannabis Extract in absolute ethanol or methanol, 1 gr. extract to 10 gr. solvent.



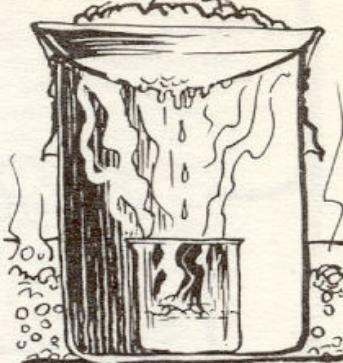
There must be no water in this solution.

Add one drop Sulfuric Acid per gram of extract.



Add acid drop-by-drop slowly, avoiding spills, splatters.

Place in Pyrex pot in Refluxing Apparatus.



Reflux 2 hours, allow to cool.

Mix solution into equivalent volume of water and 1/2 volume pet ether.



Follow ether extraction procedure.

Pour mixture into four volumes of water in jug, gently invert 25 times, letting off pressure between inversions.



Mix, let settle, and siphon off ether-extract layer.



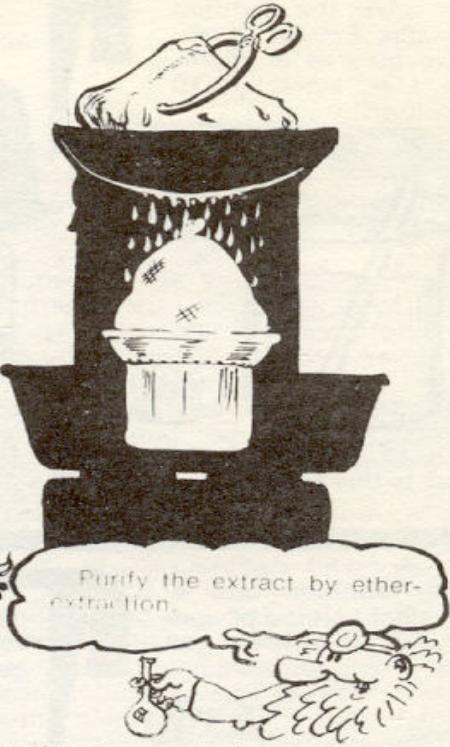
Remove ether from extract with collection pan in colander.



Super Extract!



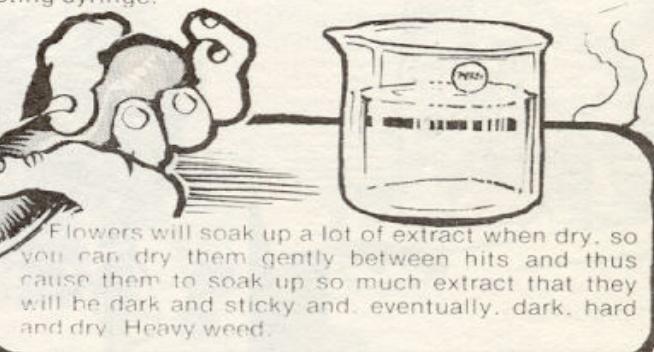
If your dope has discreet flowering tops in good, undamaged condition, you may want to intensify them to hash-like strength or beyond. If so, select a quantity of them and sew them into a cheesecloth bag, then place in the colander and reflux in the reflux apparatus to remove their resins.



Isomerize the extract with sulfuric acid, as has been described.



Take the resultant Super-Extract, dissolve into exactly the volume of ethanol necessary to wet all of your deactivated flowers, and draw it into a basting syringe.



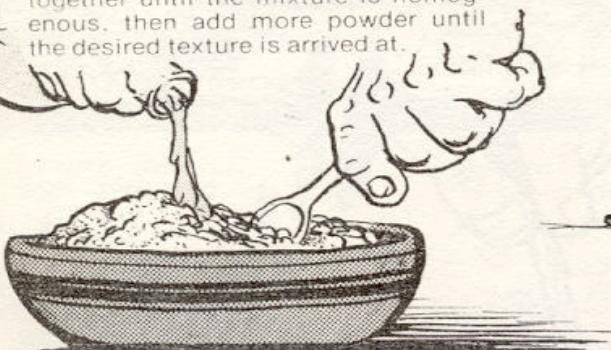
After allowing flowers to dry nearly completely in the atmosphere, preheat oven to 200°, turn off, and place weed inside to dry. Mind you turn the oven off, as the drying tops will exude explosive alcohol fumes.



AIN'T NOTHIN' BETTER'N'A
HASH SANDWICH!



Take a volume of pure *Isomerized Super-extract* and heat it until it flows smoothly, then pour into a mortar with dried, powdered deactivated cannabis material. Grind the two together until the mixture is homogeneous, then add more powder until the desired texture is arrived at.



Roll it out on a sheet of waxed paper. It can be rolled into worms, turds, balls; or rolled out beneath a rolling pin into wafers, slabs, thin sheets.

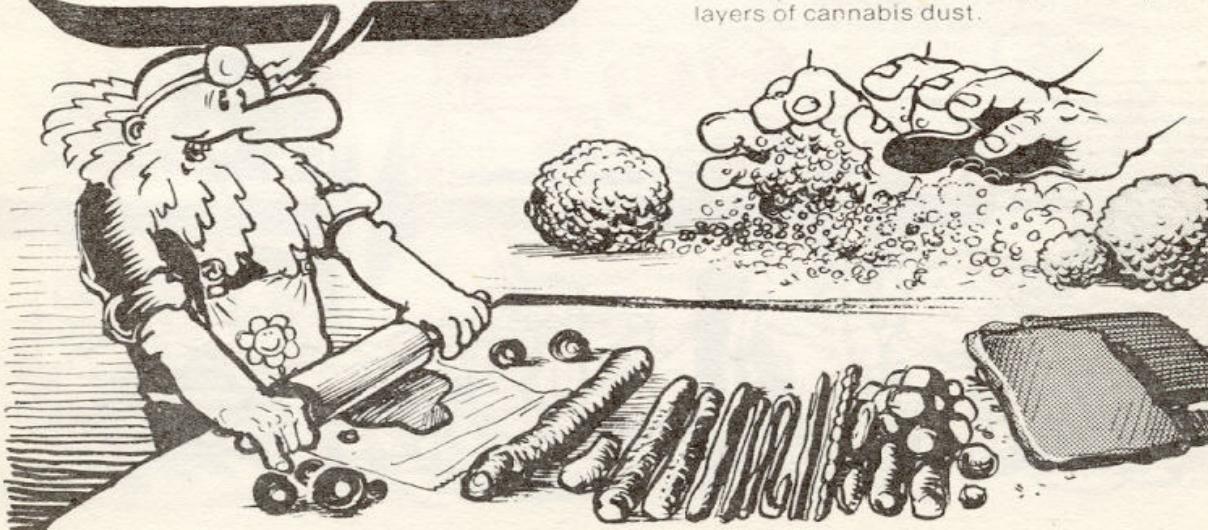
The making of hasheesh is an ancient art with countless variations. Many colors, flavors, consistencies, potencies and different methods of preparation exist all over the world, and since most of these are due to strictly local conditions, it's impractical to try and duplicate most natural hashes in the lab.

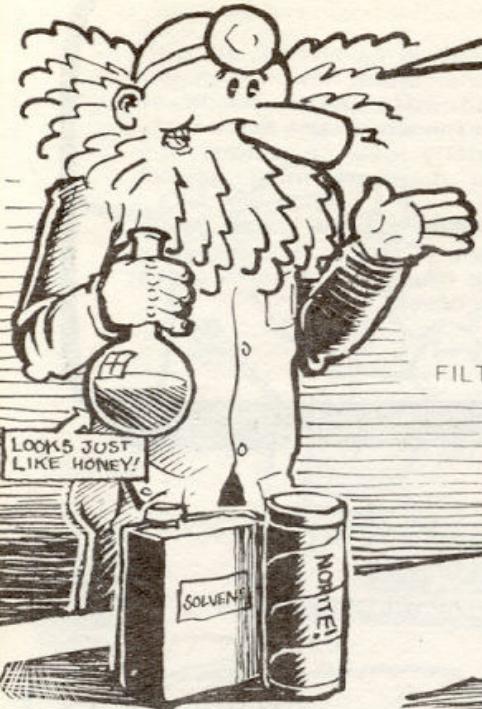
However, "artificial" hash can be made easily from cannabis-lab materials, and if done correctly will be indistinguishable from (and in some cases superior to) imported hasheesh.

Knead it with your fingers.

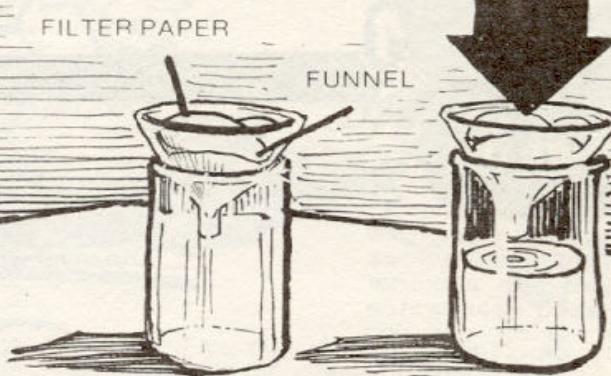


One can also roll many tiny hashballs, then roll them in the dried powder, and loosely force them together, like a snowball. Put aside in a cool, slightly moist, humidor to age; this hash will be dark, spongy and have superlative burning qualities due to its porosity. A similar hash can be made by piling many thin layers of hash upon one another, separated by layers of cannabis dust.





Cannabis extract that looks like honey can be produced by removing the colored impurities from the extract which has previously been ether-separated. This is done by dissolving the extract in ten times its volume of pure alcohol and mixing in a quantity of Norit (granulated activated charcoal) equal to half the weight of the extract. This is then filtered through fine filter paper in a funnel, and the alcohol removed by evaporation in the reflux apparatus. The residue is a thick fluid resembling dark amber honey, which may be smoked, eaten, or isomerized.



Hash Oil can be painted in cigarette papers before rolling a joint.



A little cup may be hollowed in tinfoil and heated from below, the smoke being taken in through a tube.



Joints may be dipped into a tincture of extract in alcohol and dried.



Injecting a joint with oil.



To eat hash oil it should be mixed with butter, ground nuts, or something slightly oily to aid in assimilating it into the system.



1 lb. Reg
\$150-200



1 lb. hash worth
\$600-1000



1 kilo Reg
\$200-350



Flowers - \$300,
Hash - \$600-1000



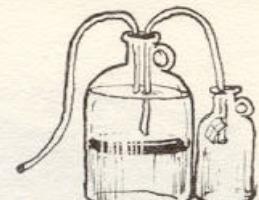
1 lb. low grade domestic weed
\$50-100/lb.



Superweed worth
\$350-400/lb.



Reflux



Prepare Hash



Separate 1/2 lb. flowering tops and
reflux in cheesecloth bags.



Isomerize



Reflux everything else.



Prepare 1 lb. hash,
1/2 lb. superflowers.



Reduce and Isomerize.



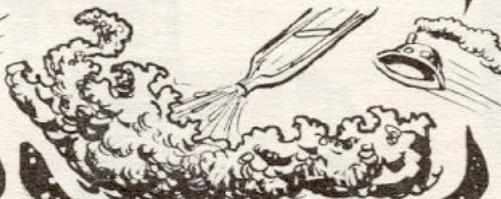
Tops bagged and refluxed



Extract reduced



Resaturated into tops



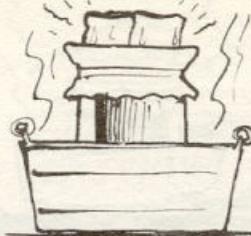
Isomerized



1 lb. weed \$300

Reflux and Reduce

Isomerize



3-5 oz. Super Extract
worth \$500/oz.



Owing as to periodic fluctuations in the price of both domestic and imported commodities, the above figures can only be considered approximate. However, there is enough give and take in the variability of plant yield to make for some profit in any operation. There is a particularly high markup for pure honey oil, for example, such that the given \$300 worth of weed can yield up to \$1500 worth of oil.



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San Francisco, Straight Arrow Books, 1971

CANNABIS ALCHEMY, THE ART OF MODERN HASHMAKING

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SUPER GRASS GROWER'S GUIDE

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PHARMACEUTICAL STUDY OF CANNABIS

(BEING A COLLATION OF FACTS AS KNOWN AT PRESENT DATE)

by E. Whimeray

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RECENT DEVELOPMENTS IN CANNABIS CHEMISTRY

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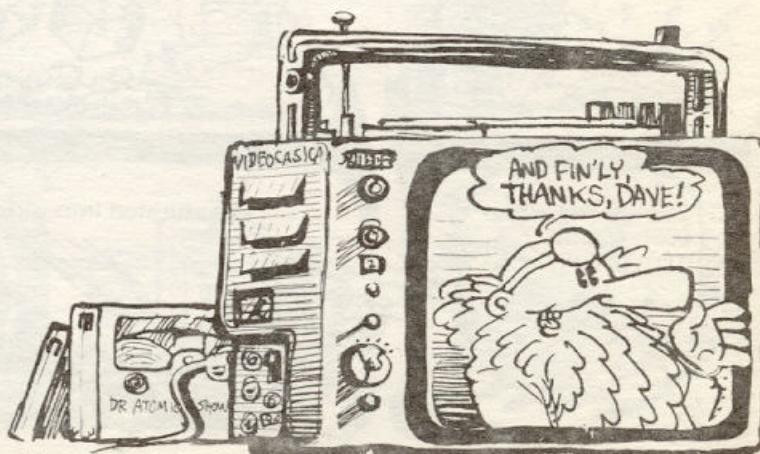
Papers of Roger Adams

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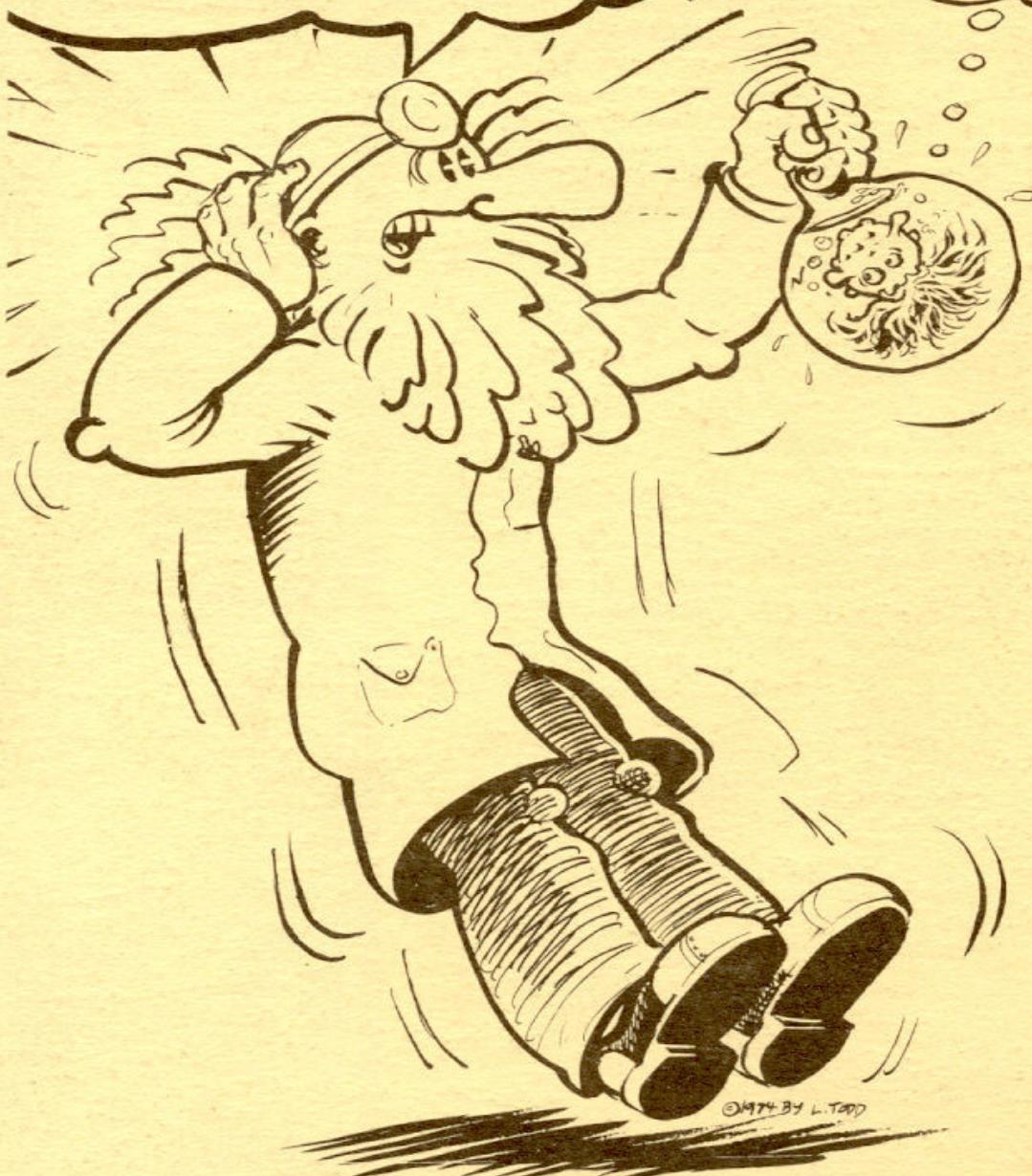
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY,

Pg. 2211, Vol 63, 1941



MEIN GOTT!
I HAVE CREATED
A MONSTER!

I HAVE BEEN
CREATED BY A
MONSTER!



AND STONED HEADS FROM 6 TO 666 CAN
CREATE MONSTERS RIGHT ALONG WITH DR.
ATOMIC! THRILLING LABORATORY FUN IN
THIS NEW SERIES AS DR. ATOMIC UNWINDS
THE UNIVERSE AND READS THE FIERY
CIPHERS OF REALITY! GET HIGHER ON
DOPE!