IT CAN BE DONE, SERIES NO. 18.*

BY J. LEON LASCOFF.1

Since the first series on "It Can Be Done" which I presented at the Baltimore meeting of the A. Ph. A. in 1930, I have been requested to continue the work and have presented exhibits and demonstrations at the annual meetings of the A. Ph. A., at various branches of the Association, and before State and other organizations. At our last annual meeting I presented Series 12 and during the past year I have given Series 13 at the Centennial Celebration of the Medical College of Virginia, Series 14 at the Connecticut College of Pharmacy, Series 15 before the Summit County Retail Druggists Association in Akron, Ohio, Series 16 at the Rutgers University College of Pharmacy and Series 17 at the First Annual Spring Clinic of the University of Buffalo College of Pharmacy.

The average pharmacist too often loses sight of the fact that his education and training are designed to fit him for more than just throwing together a group of medicinal ingredients "just as the doctor wrote them." Too often he forgets that his training is designed to enable him to detect incompatibilities of various kinds which arise in everyday prescription work and to figure out ways and means of overcoming them. Too often he relies on the "Shake Well" label and consoles himself with the thought that "shaking well" will take care of any separation or precipitation which may take place in dispensing. He does not realize the danger of this practice and is liable to forget that it is the pharmacist and not the physician who is held responsible for injury resulting from medication.

Should some change or addition be necessary in order to overcome an incompatibility in a prescription, the physician should be notified and the matter discussed with him. He will appreciate this, as very often he is entirely unaware of the incompatibility. Not only is it important for the sake of uniformity of dosage that incompatibilities be overcome, but it is also important from the standpoint of uniformity and nicety of appearance. The physician should be consulted on every incompatibility, particularly when a change in the prescription is required, so that the next time he writes the prescription he will keep the incompatibility in mind and avoid the difficulty.

Many physicians, when asked why they do not prescribe official preparations in preference to proprietaries, respond that when they prescribe proprietaries they are certain of getting the same preparation no matter where it is dispensed—a preparation that is uniform in color, taste and appearance. On the other hand, they say, when official preparations are prescribed they will differ in taste, color and appearance in each locality in which they are dispensed. Prescriptions containing U. S. P. and N. F. galenicals with other preparations should be made up with the greatest of care and the best of material, and there is no reason why any official preparation should look or taste differently when prepared in different pharmacies.

Many of the samples I am about to present were problems which arose in our pharmacy. Many came from pharmacists all over the country who called by telephone or wrote, giving the prescriptions and saying "It can't be done." My

^{*} Presented before the Section on Practical Pharmacy and Dispensing, A. Ph. A., Minneapolis meeting, 1938.

¹ 1209 Lexington Ave., New York City.

answer is "It Can Be Done" and I am happy to say that to date I have been successful in my experiments.

R	1	Iodine	gr. III
		Camphor	gr. VIII
		Chlorbutanol anhydrous	gr. XXX
		Oil of Rose Geranium	min. XX
		Oil of Thyme	min. X
		Liquid Petrolatum ad	oz. III

Dissolve the iodine and camphor in the oil of thyme and oil of rose geranium by trituration. Dissolve the chlorbutanol anhydrous in the liquid petrolatum by heating on a water-bath. Mix both solutions together.

\mathbf{R}	2	Menthol	1%	
		Phenol	1%	
		Oil of Lavender	gtts. XXX	
		Oleic Acid	oz. ss	
		Salol	oz. I	
		Olive Oil, q. s. ad	oz. XVI	
		Lime Water	oz. XXX	Π

Dissolve the menthol, phenol (crystals), salol and oil of lavender in a small amount of olive oil. Mix the oleic acid with the remainder of the olive oil and shake well with the lime water. Then mix the two liquids together. Be sure they are mixed well.

\mathbf{R}	3	Sodium Bromide	dr. III
		Ammonium Bromide	dr. III
		Elixir I. O. S. Phosph. ad	oz. III

If Elixir I. Q. S. is used instead of Elixir I. Q. S. Phosphate, a clear solution will result.

Ŗ	4	Strychnine Sulfate	gr. ss
		Dil. Nitrohydroch. Acid	dr. II
		Tr. Cardamom Comp.	dr. VI
		Agua Menth. Pip. ad	oz. III

Dissolve the strychnine sulfate in 2 oz. of the peppermint water. Filter the Tr. Cardamom Comp. twice to be sure there is no precipitate or cloudiness. Add the tincture to the first solution and lastly add the nitrohydrochloric acid drop by drop. The finished product will be clear without filtration.

Ŗ	5	Potassium Iodide	4.0
		Tr. Stramonium	10.0
		Spts. Chloroform	10.0
		Aqua Destill. ad	120.0

Mix the Tr. Stramonium with the Spts. of Chloroform. Add the water. Dissolve the potass iodide separately in a small quantity of water, and lastly add this solution to the other mixture.

R 6A Potassium Citrate	oz. II
Tr. Hyoscyami	oz. II
Aqua Destill. ad	oz. VI

Completely dissolve the potassium citrate in the full amount of water and then add the Tr. Hyoscyamus, little by little. No separation will take place.

\mathbf{R}	6B Potassium Citrate	oz.	I
	Tr. Hyoscyamus	oz.	SS
	Elixir Phenobarbital ad	OZ	IV

Dissolve the pot. citrate completely in the Elix. Phenobarb. (Elix. Phenobarb. contains enough water to dissolve the pot. citrate). Then add the Tr. Hyoscyamus, little by little.

\mathbf{R}	7	Aromatic Spirit of Ammonia	oz. I
		Oleic Acid	oz. II
		Oil Hydrocarbon	oz. IV
		Iodine Resublimed	dr. V ss

Dissolve the iodine in the aromatic spirits of ammonia. Mix the oleic acid with the oil hydrocarbon. Then mix all together.

Ŗ	8	Phenobarbital Sodium	gr. VII
		Essence of Caroid	oz. I ss
		Belladenal Tablets	No. II
		Aqua Destill., q. s. ad	oz. IV

Dissolve the belladenal tablets in water by addition of a few grs. of bicarbonate of soda. Dissolve the phenobarbital sod. in water. Mix the two solutions and add the essence of caroid. Lastly add 10 cc. of pure glycerin and enough water to make 4 oz.

R 9	Sulfur Ppt.	0.6
	Resorcin	1.2
	Salicylic Acid	3.0
	Ol. Ricini	2.4
	Spir. Dilut. ad	120.0

Mix the sulfur ppt. and salicylic acid with about 10 grs. of tragacanth and rub up to a paste with water. Separately dissolve the resorcin and castor oil in the alcohol. Add the balance of the water and gradually add this to the suspension of sulfur ppt. and salicylic acid.

R 10	Acid Tannic	5.0
	Resorcin	2.4
	Glycerin	6.0
	Aqua Calcis ad	120.0

Triturate the tannic acid and resorcin with the glycerin until smoothly mixed. Add the lime water little by little with constant trituration.

R 11	Iodeikon	gr. 62
	Menthol	gr. 36
	Salicylic Acid	gr. 36
	M. ft. Capsules No. 36	

Rub up the menthol with 36 grs. mag. oxide heavy. Separately rub up the salicylic acid with 36 grs. mag. oxide heavy. Separately rub up the iodeikon with 36 grs. mag. oxide heavy. Finally mix the three triturations and place in capsules.

R 12	Potassium Iodide	gr. V
	Diuretin	gr. V
	Aminophyllin	gr. I
	Phenobarbital	gr. 1/3
	M. ft. Caps. No. I	

All the ingredients are used in tablet form. Triturate the tablets, mix and fill the capsule.

R, 13	Phenobarbital	0.9
	Elix. Three Bromides ad	120.0

Method 1: Add 1 dr. of acacia.

Method 2: Dissolve the phenobarbital in about $^1/_2$ oz. alcohol and add the required amount of bromide salt.

R 14	Methenamine	dr. IV
	Sod. Acid Phosphate	dr. V, gr. XX
	Tr Relladonna	dr V min XX

Tr. Hyoscyamus oz. I, dr. II, min. XL Aqua. Destill. ad oz. IV

Dissolve the methenamine and sodium acid phosphate in the water. Mix this solution with 2 dr. of acacia previously mixed with water. Mix the tinctures together and gradually add them to the first mixture.

R 15 Lanolin oz. I Aqua. Destill. ad oz. VI

Mix 5.0 Gm. of sod. stearate with the water to be used. Melt the lanolin and add the mixture of sod. stearate and water to it slowly and with constant stirring.

R 16	Guaiacol	0.25
	Creosote	1.50
	Iodoform	3.00
	Ether	8.00
	Olive Oil ad	30.00

Warm the olive oil. Triturate the iodoform with the olive oil and add the guaiacol and crossote. Lastly add the other and a clear solution will result.

P 17	Strychnine Sulfate	gr. 1/4
	Quinine Bisulfate	gr. XX
	Ferric Phosphate	gr. XX
	Glycerin	dr. II
	Potassium Citrate	gr. XX
	Elix, Lactated Pepsin, a. s.	oz. IV

Method 1: Use ferrous sulfate instead of ferric phosphate. Add a few drops of dilute sulfuric acid to the finished product.

Method 2: Dissolve the ferric phosphate in about 1 dr. hot water. Separately dissolve the pot. citrate in a small amount of the Elix. Lact. Pep. and add the glycerin. Dissolve the quinine bisulfate in another quantity of Elix. Lact. Pep. and mix the solutions.

P 18	Thyroid	gr. 1/4
	Pituitary	gr. 1/4
	Ext. Cascara Sagrada	gr. 1
	Aspirin	gr. III
	Caffeine Citrate	gr. I
	Sod. Bicarbonate	gr. I
	M. ft. Caps. No. I	

Use caffeine alkaloid instead of caffeine citrate. Add magnesium oxide heavy.

R 19 Ammoniated Mercury
Bismuth Subnitrate
Glycerin
O1. Sesami, aa, q. s. ad 60.0

Triturate ammoniated mercury and bismuth subnitrate with 2.0 Gm. of sod. stearate. Add the Ol. sesami and glycerin to make an ointment.

R 20	Sodium Bromide	12.5
	Chloral Hydrate	2 .0
	Spts. Anisi	0.3
	Chloroform Water ad	120.0

Rub together the sod. bromide and the chloral hydrate with the Spts. Anisi. Gradually add the chloroform water to make 120.0.

R 21	Holocain	1/2%
	Sol. Merthiolate (1:1500) ad	oz. I

Dissolve the holocain in 10 cc. of distilled water. When the solution is added to the merthiolate solution, a heavy precipitate is formed. This is not fit for use in the eye. Therefore, add a few drops of boric acid sol. to clear up the precipitate.

R 22	Chloral Hydrate	dr. IV
	Sodium Bromide	oz. I
	Aromatic Elixir ad	oz. IV

The low alcoholic elixir should be used to prevent any separation.

R 23 Castor Oil

Spirits Turpentine

Stronger Ammonia Water, aa ad

oz. III

If prepared as written, a heavy sediment forms on standing. This sediment makes it difficult to pour the mixture from the bottle. Mix the castor oil with the stronger ammonia water very well and then add the turpentine.

R 24	Suprarenal conc.	gr. X
	Thyroid	gr. X
	Acid Acetylsalicylic	gr. LXXV
	Codeine sulf.	
	Aloin, aa	gr. V
	Ammon. Carbonate	gr. L
	divide in caps. No. XXX	

Mix all the ingredients except the ammonium carbonate together and dispense in a larger size capsule. Separately, place the ammonium carbonate in a very small capsule and place the small capsule in the large capsule. No reaction will take place and the capsules will keep indefinitely.

R 25	Tr. Nux Vomica	10.0
	Fe. et Amm. Citrate	1.5
	Chloral Hydrate	1.5
	Ovoferrin ad	120.0

Tr. Nux Vomica and iron and ammonium citrate react upon each other, causing a precipitate which imparts a cloudiness to the whole solution. Therefore, be sure the Tr. Nux Vomica is well diluted in Ovoferrin and add it to the other ingredients lastly. Also, it is advisable to check the freshness of the Ovoferrin.

HOSPITAL PHARMACY INTERNESHIPS.*

SOME NOTES ON THOSE HOSPITAL PHARMACY PRACTICES HAVING A PARTICULAR VALUE AS POSTGRADUATE EXPERIENCES.

BY H. A. K. WHITNEY,1

In that excellent chapter on "Hospital Pharmacy" (1), Dean Spease has written that "Pharmaceutical Educators recognize the value of the special training that a hospital pharmacist receives while serving his interneship. His new understanding of scientific medicine, rational therapy and the needs of physicians help him vastly in the practice of true professional Pharmacy outside of the hospital."

^{*} Presented before the Sub-Section on Hospital Pharmacy, A. Ph. A., Minneapolis meeting, 1938.

¹ Chief Pharmacist, Univ. of Michigan Hospitals.