

THE UMBELLIFERÆ GROUP

DR. JAMES F. DUTHIE

LADIES AND GENTLEMEN,

To-night, it falls to me to present an address and the subject I have chosen is "The Umbelliferae Group". This group is important as it contains the economic plants, carrot, celery, parsnip, and many flavouring herbs such as parsley, coriander, caraway, fennel, chervil, angelica and samphire, as well as our medicinal plants, *Æthusa*, *Asafætida*, *Cicuta*, *Conium*, *Enanthe crocata*, *Enanthe phellandrium*, *Petroselinum* and *Sumbul*.

Firstly, a few words about their common structure. The flowers of the umbelliferae have usually five sepals, five petals, five stamens, and two carpels which are united and have two short styles. The fruits are very characteristic of the family and consist of a splitting schizocarp. When ripe it splits into two halves, each of which hangs from a vertical stalk and is called a mericarp. The fruit wall is usually ridged, and longitudinal canals containing oil are generally present. This oil, in some species, may be poisonous. The leaves are mostly of the much divided parsley type and the untutored person has difficulty in telling one plant from the other. This, together with their dangerous nature has resulted in them being left very much alone. Brimble has pointed out that although they are widespread in this country and northern latitudes "they are never used for ornamental purposes and the housewife never thinks of them for table decoration!" It seems strange too, that in so large a group there should be no such friendly names as "Traveller's Joy", "Love in a Mist", etc. The children, even, have not found any attraction in them and the farmer distrusts them. Yet they contain many of the essential oils of commerce and pharmacy and so enter into the various aspects of modern life, "Ministering to luxury as well as to health" (Wheelwright). Among those growing wild we have (Brimble);

- | | |
|--------------------------|------------------------------|
| 1. Wild beaked parsley | <i>Anthriscus sylvestris</i> |
| 2. Common beaked parsley | <i>Anthriscus vulgaris</i> |
| 3. Hedge beaked parsley | <i>Anthriscus torilis</i> |
| 4. Fool's parsley | <i>Æthusa cynapium</i> |
| 5. The common hemlock | <i>Conium maculatum</i> |
| 6. Wild parsnip | <i>Pucidanum sativum</i> |
| 7. Cow parsley | <i>Heracleum sphondylium</i> |
| 8. Rough Chervil | <i>Chærophyllum temulum</i> |
| 9. Sweet Cicely | <i>Myrrus odorata</i> |
| 10. Coriander | |

Then there are the dropworts distinguished by their long fruits, still surmounted by the styles and the fact that they are all water loving plants and belong to the genus "Ænanthe".

Among them are ;

Water dropwort	<i>Ænanthe fistulosa</i>
Hemlock dropwort	<i>Ænanthe crocata</i>
Parsley dropwort	<i>Ænanthe lachonalia</i>
Fine leaved dropwort	<i>Ænanthe phellandrium.</i>

Then we have ;

Water parsnip	<i>Sium augustifolium</i>
Broad leaved water parsnip	<i>Sium latifolium.</i>

Also we have the Marsh Worts whose leaves are not so finely divided.

Included there we have ;

Celery	<i>Apium graveolens</i>
Hares ears	<i>Bupleurum rotundifolium</i>
Alexander	
Burnet saxifrage	<i>Pimpinella saxifraga.</i>

All the above have compound umbels while ;

Marsh pennywort	<i>Hydrocotyle vulgarium</i>	} have simple umbels.
Wood sanicle	<i>Sanicula europæa</i>	
Sea holly	<i>Eryngium maritimum</i>	
	<i>Eryngium aquaticum</i>	

In Clarke's *Dictionary* you will find, among these wild growing plants, that mention is made of *Æthusa*, *Conium*, *Heracleum*, *Œnanthe crocata*, *Œnanthe phellandrium*, *Sium latifolium*, *Apium graviolens*, *Pimpinella saxifraga*, but the *Hydrocotyle* is the Indian *Hydrocotyle* and the *Eryngium aquaticum* is given as well as the *Eryngium maritimum*. The *Sanicula* which is described by Clarke is the Water *Sanicula* and is from a mineral spring in U.S.A.

It has always been the custom of doctors, meeting with a difficult case, to enquire into the family history of the patient. The information received would often open up a fresh approach or confirm an opinion already forming in the mind of the physician. With the example of this established practice before me, I thought we might look into the family history of the Umbelliferae and see if it might help us to understand them and their way of working.

Hutchinson, in his *Popular Botany* tells us that "As a protection against field mice, insect larvae and other underground animals, many food storing roots develop poisonous and disagreeable substances in their tissues in the way of noxious alkaloids, foetid gum resins and other products." Protected roots of this kind are found among the Soapworts, various species of *Gentian*, the thick and poisonous main stem root of *Monkshood* and many umbelliferae. These protective substances are the main factors in producing a plant of medicinal value, so it will be of advantage to discover a little more about them and their origin. Those who have made a study of the history of animals and plants tell us that there have been great changes in the habitats of practically all of them. The Umbelliferae are scrub plants, we are told, and their original home was the semi-waste lands of Persia and Central Asia. If we think of the nature of this environment we can see how unfavourable conditions must have been.

The country is not quite a desert, but nearly so, and yet plants are continually trying to utilise it. Water is scarce, land is poor; heat is excessive. In addition, the animal who is fleet of foot finds this type of country suits him. He has time and opportunity to look around and his food is the scrub grass

and other plants. Now the umbelliferae plants, whose natural habitat this is, have to take all these things into consideration. Each develops accordingly, acquires habits, likes and dislikes just as surely as every animal does.

During the long spells of drought, all the living material of the plant is withdrawn underground where it is preserved from drying up. When the rainy season begins, at once all become active above ground and what formerly appeared a desert is soon alive with flowers. Above ground, the stems are usually hollow, and suitable for storing moisture. Should a break in the stem surface occur, various members of the umbelliferae secrete a gum resin to seal it, and so prevent the loss of the precious moisture. In many, there are the essential oils, and Professor Tyndall found that infinitesimal quantities of these oils thrown into the air greatly increased the plants capacity to absorb heat rays of low tension. Dr. Geo. Henderson (F.L.S.) has suggested that, in this way, these oils may prevent injury to the plant from frost, at one of the most critical periods in its life, namely, when it is setting its fruit. The leaves, which are much divided and fern-like, probably bear the same relationship to storms as the thread-like leaves of the waterworts do to water. They offer no large unbroken surface and thus avoid rupture.

The grouping of the flowers is also the result of planned endeavour. Just consider the lay-out. If one were in a crowd, and wished to attract the attention of someone outside, one would naturally raise a hand, while to attract the attention of an airman an open space is chosen, and something is spread out flat. The plants do that also. In the hedgerows etc., where conditions are a bit crowded, we get the flowers in spikes and racemes attempting to catch the eye of the insect life that is likely to fertilize them. In the open country on the other hand, we find the Umbel is spread out to be observed by the insects that wing it over the semi-desert places. The flowers are not elaborate—again an economy—but are usually white, and are grouped together, so that they become more conspicuous and have thus a better chance of pollination. Every detail in their structure has a meaning in their lives. Against

the animal life of the country a continual struggle is going on. Some plants, like the cactus group, rely on spikes and spines to ward off the marauder. The Umbelliferae, apart from the sea holly, which grows spines, seem to rely on poison, or some disagreeable substance, for their protection. These poisonous substances exist in cells undifferentiated from the other tissues of the plant except in the "arrangement of the molecules of their contents". Sometimes, the poison is located in the root, sometimes the seeds, the leaves, the hairs of the leaves or, perhaps, the whole plant may be poisonous.

A certain amount of doubt exists in the minds of some people regarding the presence of poisons in Umbelliferae plants which are generally regarded as dangerous. I think we will find that, at some part of the year, a plant may be very much less poisonous than at another. Until the seed is ripe the whole economy of the plant is directed to protecting it, and in the weeks that precede this ripening, the poisonous properties are most marked. This is very well shown by the Chinese plant Ma Huang, which has been used for centuries in the treatment of hay fever. Scientific inquiry showed this plant to be Ephedra from which Ephedrine is obtained. The native said it should be collected in the autumn and investigation has shown that there is a 200 per cent. increase in the amount of Ephedrine present in the autumn as compared with the Spring (Wheelwright). There are other instances. Nearer home we know that nettles may be handled with impunity at one part of the year but not at another. With the apple or other fruit, we see that the tree makes it unpalatable with citric acid until the seeds are ripe. Then sweetness is added and colour, to attract the birds and animals who assist in their dispersal.

A circumstance which influences the amount of noxious substance present is a change of environment. Professor Chopra in *Indigenous Drugs of India* tells us that the properties of Hemp (*Cannabis indica*) change when it is transferred to a temperate climate. Dr. Franz, quoted by Hempel states: "locality, season and fructification develop a considerable difference in the quality and quantity of this acrid principle. The

more woody the stalk the less acrid it is, so that, during fructification, the acidity and strength are contained in the roots and the blossoms or, rather, the germen. The fibres of the roots are acrid previous to fructification, but afterwards they lose their strength." It is recorded by Dr. Tyler that Dr. Cooper was so particular over this point that he had a special permit from Kew to collect specimens when considered most suitable.

Among the umbelliferae which have this poison protective quality we have *Æthusa*, *Cicuta*, *Conium*, *Enanthe crocata*, *Enanthe phellandrium*, *Petroselinum* and, among the gum resins, *Ferula asafœtida* and *Dorema ammoniacum*. They all act principally on the central nervous system and upon the groups of nerves in the abdomen. The glandular system is markedly affected by some, and, by most, we have effects on the skin, mucous membrane and bladder. On the whole, inflammation is not a feature. There is a low grade inflammation causing infiltration and hardening of the glands and tissues, but the major effect is a disturbance of the functional life of the patient. "An increase, or decrease or irregularity of the activity of the various organs."

These plants and their products have been in use from the very earliest times. Owing to the Egyptian habit of mummifying their dead the gum resins were very much in demand, and we know that in Persia, *Dorema ammoniacum* was collected for its resin, gum ammoniacum, 4,000 years ago. This gum exudes from the stem, and gathers into drops, which harden on exposure to the air. Insects caught in these drops are preserved, and it has been suggested that observing this gave rise to the idea of preserving the dead by mummification. That the Egyptians put great value on these desert plants is shown by the earliest, well recorded "geographical expedition". It was undertaken by Hatasu, Queen of Egypt, from Thebes 3,000 years ago, and proceeded to what is now Somaliland, to collect incense, myrrh and gum resin plants.

Homœopathically, we have found *Gum ammoniacum* useful in catarrhal conditions of the chest and in asthenopia and other exhausted conditions of the eye—usually with burning and pain. The other important member of the gum resins is

Asafœtida. This is obtained from a shrub, *Ferula asafœtida*, which grows in Afghanistan and India, and reaches a height of 6 ft. to 9 ft. The *Asafœtida* is obtained by making incisions in the upper part of the root and collecting the juice, which is allowed to harden in the sun. Its taste is bitter and it smells strongly of garlic. Although *Asa* is the most fœtid of the resins it is not so acrid and irritating as the others. Large numbers of people take it without any other effect than the offensive odour which emanates from their secretions. Hempel quotes a Captain Kinnear who relates that "in Persia the leaves are eaten like common greens as is also the root once it has been roasted". In this country it is claimed by the connoisseur that the "finest relish that a beefsteak can possess may be communicated by rubbing the gridiron, on which it is to be cooked, with *Asafœtida*".

In those who are sensitive to *Asa* we get a number of symptoms in the stomach. The typical pain is in the epigastrium, and is as if from over eating, or as if the heart were distended, a sense of fullness and discomfort. The pulse becomes weak and the stomach upset is frequently followed by diarrhœa. A copious flow of saliva is characteristic.

Although there is the emission of flatus, the abdomen becomes distended, and a reflex peristaltic action sets in. Then the flatus seems to rumble about the bowel, and a choking feeling comes into the throat, as if a foreign body were forcing its way up from the stomach. Then there does not seem to be enough room inside the patient for all that is going on. Everything is trying to force its way out or upwards. This leads to anxiety and breathlessness with a congestion in the chest and a livid face. The anxiety causes him to "walk about for relief". Symptoms of hysteria are marked, creeping chills followed by flushes of heat, nausea and inclination to vomit but no vomiting.

Asafœtida has been related to the purple congested type of person who appears to be heading for a heart condition. Kent compared it here with *Carbo animalis*, *Pulsatilla*, *Carbo veg.* and *Aurum*. Not the lean type but the fat, flabby person who is extremely sensitive to pain. The pains are mostly of a

pressing, shooting type and go from within out. They are worse at night, and are usually associated with numbness, which is a characteristic of the remedy. This numbness may come after the pain or be present on waking from sleep. Kent also relates *Asafætida* to the syphilitic complaints and pains. He mentions the disease some fifteen times in about three pages. Dr. Margaret Tyler on the other hand, although she quotes much from Kent, does not mention it. Menses are premature with cutting pains in abdomen. Urine and stool are darker than usual. J. B. Bell gives the stool as dark brown or yellow, disgustingly offensive, with colic which is relieved by pressure. *Asafætida* has been used successfully in hysterical asthma and pulmonary congestion. In hysterical cough in women with florid complexions and of nervous temperament. We may, however, overdo this hysterical element. Some of the belief, I feel sure, has come to us from allopathic use of the nasty tasting drug to dissuade the hysteric. As far as the mentals are concerned there is not much change from normal. No weeping or laughing: no anger or gaiety, no strange beliefs or behaviour but rather an anxiety and a fainting which might be accounted for by the distension and weakness: weak pulse and cool skin. The action of *Asa* on the glands is seen in its successful use to restore milk to the breast when it becomes deficient, or to dry the breast when milk is no longer needed. It seems that the main action of *Asa* is on the large plexuses of nerves in the abdomen, and that the mental symptoms are secondary.

In dealing with the power of *Asa* to restore the milk to nursing mothers, Hughes said "some principle inimical to the legitimate functional life of the sexual system, fastens upon the brain and endeavours to extinguish its organizing power in that direction. The *Asa* restores the brain control and the milk functioning becomes normal again." It would appear as if this brain control were absent in many other *Asafætida* complaints.

Leaving the gum resin we come next to several members noted for their markedly poisonous properties. First of these is *Æthusa*.

Æthusa cynapium, one of the more important members of the umbelliferae, gets its name from the Greek *ætho*=I burn.

Fool's parsley, as it is popularly called, is thereby labelled as being very acrid. It is common, and is found in waste places, throughout the country. Formerly the plant was confounded with the Spotted hemlock, *Conium maculatum*, but is distinguished by its stem not being spotted. It grows to a height of about 2 ft. and has a white tapering root. Its leaves are darker than Garden Parsley, and its flowers are white, whereas garden parsley flowers are of a pale yellow colour. A characteristic of the *Æthusa* is the beard of three long, pendulous leaves which hang under the flowers. We use a tincture made from the whole plant. Hartlaub and Trinks published a proving of *Æthusa* in 1833 but much of what they recorded was questioned by Dr. Roth, an enthusiastic early Homœopath, and later by a Dr. John Harley. The latter, writing in the *St. Thomas's Hospital Reports*, concludes that there are not any poisonous properties in *Æthusa* and records sixteen experiments of his own in which large doses of the juice were entirely inoperative. Cows, horses, sheep, goats and swine are said to eat it without harm. Cases of poisoning, however, have occurred among people who have eaten the leaves in mistake for parsley. These cases show that *Æthusa* affects powerfully the sensorium and the liver. All the symptoms of bilious vomiting are present. Nausea, vomiting, diarrhœa, extremities cold, benumbed and affected with tremors. Languid and weary feeling, heaviness and sleepiness, weakness and giddiness—they all show disordered liver function. The effect *Æthusa* has on the central nervous system is shown by one child who had eaten some of the plant and was seized with acute abdominal pain and nausea but without vomiting. She could not swallow, had a vacant staring look, and was unable to answer questions. Her lower jaw became fixed. The case ended fatally, so that there must have been some poisonous property present.

Æthusa fits the children, who, having had their digestions thoroughly upset, come down with severe diarrhœa, vomiting and collapse. It has the well-known characteristic symptom that the child falls asleep after the exertion of vomiting, and, after a time, wakes, and is prepared to have another meal. It is said that the child has an intolerance of milk, but it is not

stated what suits him better. The milk usually comes up almost as soon as taken. Kent also found *Æthusa* suitable to the older fry who upset themselves with constant nibbling and eating between meals. In the adult, the complaint is usually of regurgitation of food an hour or so after it is taken. The abdomen becomes tense, swollen and sensitive. In his book on Diarrhœa, Dr. Bell states that the motion is inodorous, undigested, greenish or yellow, accompanied by tenesmus, often violent, during and after stool. Here again we see the acrid property of *Æthusa*. The surface of the body becomes cold and covered with a cold clammy sweat.

In the spasms which occur, the thumbs are turned in and the eyes turned down.

With the languor and weakness we would expect mental tiredness to be present in the more chronic or subacute case and Clarke found *Æthusa* a help in examination fatigue and inability to study.

As *Æthusa* is credited with the saving of many children, who without it would have died, you will, no doubt, be pleased to honour the name of Dr. Kullenbach, who, in 1850, in the *Gazette Hom. de Paris*, was the first, I believe, to praise *Æthusa* in the gastric upsets, with intolerance of milk in children. He, fortunately, saw its great possibilities. The next member we might consider is Conium.

Conium maculatum: Spotted hemlock. It is a biennial plant flowering in June and July. The root is fleshy and tap shaped with a disagreeable smell but sweetish taste. The stem is from 3 ft. to 6 ft. high, hollow, smooth, and with reddish or purple spots or streaks. The leaves are large, spreading, repeatedly compound, and resembling the parsleys generally. When rubbed the leaves have a peculiar odour resembling that of mice. Animals are said to eat it with impunity—but sometimes they are not so fortunate. The root does not generally seem to be poisonous. It has been eaten with perfect impunity by many botanists, and the Russian peasants have eaten it as a food. This innocuousness may depend on the time of the year when the root is gathered and the coldness of the climate. Poisonings have mostly been from people using the plant in mistake for

parsley. Hughes found it difficult to accept many of the earlier symptoms credited to *Conium*. Hahnemann, he felt, had gathered them from patients who were receiving *Conium* while suffering from cancerous or other serious illnesses. Many of the reactions the patients made seemed to Hughes more likely to be from their disease and not due to the action of *Conium*. Hughes later records a statement made by the Dr. Harley previously mentioned, which was, "the main action of *Conium* is upon the motor centres which are, as it were, put to sleep. During motion, the symptoms appear first in the legs, but during rest, they appear in the eyes. Here there is enfeebled accommodation, with giddiness attending every fresh attempt to focus. This is followed by ptosis. From fuller doses there develops a dull, lazy or fixed expressionless stare and dilatation of the pupils. Paralysis of the 3rd, 4th and 6th cranial nerves comes on. All this in the matter of an hour—in another three hours the symptoms are gone. Consciousness is but little affected and the mind rarely and but slightly. No other effect on the system was observed." It may be noted that this action of *Conium* on the nervous system is purely functional and does not show a similarity to any general paralysis originating in the brain or spinal cord. These diseases are mostly inflammatory and do not clear up in the matter of *Conium*. The latter has more the action of *Curare* or *Gelsemium*.

If the *Conium* state develops into a chronic condition, we get a very profound effect on the system. The mental condition makes one think of a chronic alcoholic. There is a slowing down of the working of the brain : slowness to comprehend : a tendency towards idiocy rather than insanity. "There is complete indifference to his surroundings." This person cannot concentrate, cannot think and the "mind gradually gives out". These symptoms may be the result of prolonged grief or other deeply disturbing emotions. The characteristic mental condition is one of depression, timidity, taciturnity, aversion to society and yet a dread of being alone. On the physical side there is the same weakness manifested in the muscles. "A general breakdown". Weakness of the muscles of swallowing : of the bladder : of the bowel. Numbness with the weakness,

There is none of the violence of *Cicuta* but rather a gradual slowing down and exhaustion. Vertigo is marked. Vertigo from almost any movement but characteristically when lying down and turning in bed. During sleep there is a tendency to copious perspiration. *Conium* has a cough which is dry and persistent, caused by a tickling in the throat and behind the sternum. It is worse from taking a deep breath and worse lying down, worse talking or laughing: must sit up and cough it out. Improved by letting the legs hang down. This relief from letting the legs hang down becomes a general relief as it eases the congested venous side of the heart.

Conium has also enjoyed, at one time, a reputation in the treatment of blepharophthalmia with suppuration, ulceration and excessive photophobia. Hughes regards this power of *Conium* as remarkable as no such symptoms have appeared in the provings. Mostly the treatment has been by massive doses given by allopaths, and one of them has stated that, in proportion as the dose increased, so was the cure speeded up. To this Hempel remarks, "There is not anything inherently wrong in giving a larger quantity of the appropriate drug if, in so doing, we accomplish a good which a lesser quantity would leave undone." *Conium* has a slow indurating effect on glands and also on the lips and eyelids. It is reported to be specially effective in scirrhus conditions of the breast, and on hard swellings, particularly after injuries. The active principle of *Conium* is an alkaloid Coniine or Conia which is very volatile and easily decomposed. A Professor von Schroff is mentioned by Clarke as one of four who carried out a heroic proving of *Nicotine*. He, with the help of three students also instituted a proving of *Conia*. Together they carried out twenty-seven experiments using doses of .003 to .086 grammes of *Conia*. According to von Schroff, *Conia* shows a close relationship to *Nicotine* but has points of difference from the alkaloids of the other solanaceae, atropine, daturine, and hyoscyamine. He writes: "*Conia* has extreme prostration of all the voluntary muscles with consciousness of this condition, while by the solanaceae the sphincters especially are paralysed, and in the case of atropine and daturine, notwithstanding extreme muscular weakness, a strange desire for

motion manifests itself, increasing even to combativeness. Also, the solanaceae produce great dryness of the skin, the oral and pharyngeal mucosa, while *Conia* constantly causes perspiration of the hands; with veratrine, *Conia* shows the peculiarity of causing convulsions emanating from the spinal column and both differ from strychnine in that the latter produces, especially, tonic spasms. From morphia, and the active principle of canabis indica, it differs essentially. Decrease of sensibility, depression of cerebral function, a soporiferous condition, appear only after large doses of *Conia* and along with them is the muscular weakness and weariness—a not well feeling. There is a total absence of that appeasing influence of opium, increasing the physical, and to a certain extent the mental feeling of comfort. The muscular weakness setting in after *Conia* is real, that after opium only apparent. *Conia* distinguishes itself from *Aconite* in that it lacks the diuretic action of the latter and does not produce in the skin a sensation of crawling.”

Now let us consider *Cicuta*—Water Hemlock, Cow Bane.

This plant is one which shows the characteristic action of the umbelliferae, on the central nervous system, on the abdominal nervous plexuses and the glands. It is more violent in its action than *Conium*. The root of the plant is tuberous and may be mistaken for parsnip. A characteristic feature of the root is the circular cavities, one above the other, which are seen when it is cut longitudinally. The root is yellowish, but becomes darker on exposure to air. Our tincture is prepared from the root gathered just before flowering time. According to Wibner, quoted by Hempel, the poisonous effects of the plant are most marked in the spring of the year. In small doses or in those less susceptible, *Cicuta* produces languor and sleepiness, while in larger doses it causes vertigo, delirium, trismus, convulsive spasms, epileptic attacks, symptoms resembling the poisonous effect of *Strychnine*. The solar plexus is also affected and gives rise to spasm affecting the diaphragm, abdominal muscles and bowels. There is spasmodic and burning pain in the stomach with heat and dryness of the mouth and throat. There is disturbance also of bladder control, and we get either retention or involuntary urination. In the respiratory system we have

the same dryness and constriction of the chest, the larynx and the nasal passages. Its effect on the glands is seen in the late appearance of the menses, suppression of the lacteal flow and atrophy of the breasts. Following the acute attacks there is extreme exhaustion. The heart action is weak and the contractions are irregular. The pulse is slow and small. Heaviness and want of strength in the arms, numbness generally. The veins are distended. The motions, according to Bell are dark, offensive, frequent and expelled suddenly.

Cicuta also has a marked action on the skin, producing a crop of boils, or an eruption of pustules, which run together to form honey-coloured scabs. Eczema capitis. Teste suggests that as the eruptions of *Cicuta* are mostly on the head and face, suppression gives rise to symptoms of the brain and head. (*Æthusa* is similar in its upsets from suppression). Mentally, the *Cicuta* is a shy person given to violent agitation. Kent declares he is afraid of company and wants to be alone. His spasms may be brought on from injuries of any kind, concussion, pain or even drafts. The convulsions spread from the centre outwards thus differing from *Cuprum*. Sometimes, the memory becomes a blank for hours or days without evidence of convulsions having occurred. At other times all the evidence of spasm may be a strabismus: a jerking backwards of the head; staring with eyes turned upwards. (In *Æthusa* you will remember the eyes were turned down in the spasm.) Clarke gives as characteristic of *Cicuta* a "jerking of the left arm which may continue all day". The attacks, as we have said, come suddenly, perhaps with the patient falling without any previous warning. Kent is of opinion that an aura in the stomach may give warning. Between the attacks the *Cicuta* child is mild, placid, gentle, which distinguishes him from the *Nux* and *Strychnine* patient. In the abdominal complaints *Cicuta* is < from pressure where *Asafætida* was > from pressure. The violence of its abdominal action may result in prolapse of the rectum and is usually accompanied by severe urging to urinate. The abdomen despite bowel action is distended by flatus. The time aggravation is given by Bell as 2-5 a.m. *Cicuta* had formerly a reputation in conditions arising from splinter and puncture wounds but, later, its place was

taken by *Ledum* and *Hypericum*. The predominant skin sensation is chilliness, which may start as a coldness in the chest and spread to the extremities. Heigigke sums up *Cicuta* by saying, "It may be considered in mental conditions or affections of the brain and spinal cord when associated with spasms, gastralgia, skin diseases, bladder paralysis and violence." Hughes found it useful in hiccough and belching, when of a spasmodic character, and records that its action on the central nervous system led to its use in cerebrospinal fever. A Doctor Baker of Bavaria claimed to have treated sixty cases successfully. It might meet the nervous eczema of the face which is at present treated allopathically with phenobarbitone.

Enanthe crocata : Hemlock dropwort.

The *enanthes* are mostly water growing, smooth stemmed plants and may be found in ditches or marshes in almost all parts of the old world. In the *crocata*, the flowers are white and grow on long pedicles. The *enanthe* group is the most violent in action of all the *umbelliferae*. In the volumes for October, November and December, 1872, and April and May, 1873 the *Montpellier Medical* featured a very complete study of *Enanthe crocata* by one, Dr. Bloc. From these volumes a study of about fifty cases of human poisoning appeared in the 32nd volume of the *Journal of Homœopathy* and forms the basis of our knowledge of this remedy. Some experiments on rabbits and dogs were also reported by Dr. Bloc, using a resinous extract of the root of the plant. These produced symptoms analogous to those obtained in humans. Examination of the root showed it to contain a volatile oil, a fixed oil, a resin, and colouring matter. The cases of poisoning which have been recorded have been from cooked and uncooked parts of the root used in mistake for parsnip. The resemblance of the acute symptoms to those of epilepsy and its sequelæ has been so close as to have excited comment from all who have witnessed them. The activity of the poison is very sudden; sudden convulsions: "trismus with biting of the tongue, followed by sleep and oblivion of the circumstances." The trismus lasts right through the period of the illness and prevents the administration of emetics. That the poison is deadly and acute is shown by one group of

six deaths in which four occurred in the first hour and all from syncope and prostration. Cattle can eat the stalks apparently, but to them also the root is very poisonous. Farmers lose cattle mostly when they have the farm ditches cleared. The roots thus pulled up are thrown on the bank and, later, are eaten by the cattle. The cattle drop as if "thunderstruck" one observer states, and they emit a reddish offensive fluid from the nostrils. When, in the human, the attack is not suddenly fatal, there may set in a stage of excitement in which there is a mad and furious condition, as if the person were intoxicated and quarrelsome. Memory is affected, and the patient may not remember anything that has happened during his illness. "Vertigo with nausea and vomiting." The vomiting may be obstinate and last for days without relief.

With all the symptoms there is a tendency towards convulsions. The experiments on animals showed inflammation and softening of the medulla oblongata and its neighbourhood. The writer in the *Journal of Homœopathy* points out that the symptoms of *Ænanthe crocata* most closely resemble epilepsy, but, in the latter condition, the attacks last, on the average, ten or twenty minutes while the sufferings produced by the poison last for several hours, perhaps eight hours, or even a day or two. Also, in epilepsy, the trismus never lasts beyond the attack and may not be present. In poisoning cases it not only appears during the general attack but lasts very long, even so as to prevent emetic treatment which has to be conducted through the nostrils by catheter.

Another of the *Ænanthe* group, which we use, is the *Ænanthe phellandrium*. It grows in water like the *Crocata* but has not its acutely poisonous properties. There are the vertigo, nausea, vomiting, distension, diarrhœa, drowsiness and weakness like the majority of the umbelliferae and also one or two characteristic symptoms of its own. "Pain in the lactiferous ducts when the child is not nursing", worse right breast. It has also pain at the nipple when child is applied. The pains at the breast shoot inwards. This is the opposite of *Asafœtida* and *Ol. animalis* the pains of which shoot outwards. "Desire for acids" is also a leading symptom. It is of interest to note, *re*

this desire, that in one of the poisoning cases of the *Crocata* (Obs. 3) the woman came to herself after drinking a little vinegar. During the day there is great sleepiness and heaviness with frequent yawning. Many vertigo and head symptoms come on during rest (sitting or lying) and are better in the open air. There are catarrh and asthma symptoms which are worse in cold weather and improved in warm. *Phellandrium* has a continuous and suffocating cough with a purulent expectoration. At one time it had a reputation as a remedy for phthisis and was spoken of as a universal remedy for coughs. Repeated attacks of influenza of weeks or months duration were benefited by it. Mentally the patient shows some instability. He varies from sad, melancholy moods to extravagant merriment.

Here we might mention *Pastinaca sativum*, which gives us the edible root parsnip when it is cultivated, but in its wild state, or as Clarke informs us, after the first year, it is very with illusions of vision, quarrelling or fighting: "continually poisonous. The symptoms produced resembled delirium tremens trying to get out of bed." The effect on the stomach was peculiar. "The irritability was so reduced that emetics would not work even when the dose was doubled." Milk was not tolerated in cases where vomiting occurred. There was evidence that handling the plant caused blisters on the hands of a child. This plant is sometimes called *Pucedanum sativum*. It is biennial, having yellow flowers every second year. It is native to England and Ireland but does not grow wild in Scotland. It derives its name from the latin *Pastinum*, a kind of dibble which its root resembles in shape.

Radex sumbul, Sambul, Musk root. This also appears in Clarke's dictionary. It was introduced into Germany from Russia about 1840 and, later, was brought to England. The root comes from a plant closely resembling *Angelica*. It is a native of Persia and some of the more remote parts of Central Asia. There are two varieties, the one Russian and the other Indian. They have a pure musky odour: taste bitter and slightly suggestive of *Ammoniacum*. German analysis showed that, besides the usual volatile oils and resins, the plant contained a crystallizable acid, called sumbulic acid, and tannin.

Sumbul seems to have the usual Umbelliferae effect on the abdominal centres and we have intestinal gases with rumbling in the abdomen, constipation or diarrhœa. Urging to stool with scanty motion or passing of slimy stool and urging to urinate. Coldness is a marked feature. "Can't keep warm." "Least draft is felt down the spine." "Sensation of internal coldness and shuddering." "Great sensitiveness to cold air." H. A. Roberts in his *Rheumatic Remedies* states that it is useful in rheumatic carditis "when heart's action is full, sharp and at times irregular." Heinigke gives palpitation from slight causes with irregular weak pulse < from any excitement of imagination. "Fainting from slight causes."

Vertigo is present and may come from any movement including stooping. There is also a left-sided chilliness and a left shoulder rheumatic pain. In the eye we have a stupifying pressure and passing dimness of sight. The mood produced is, rather strangely, one of cheerfulness. The patient smiles continually without apparent cause. The sleep is usually sound and the dreams vivid and pleasant. Later there is depression. It is suited to nervous people with spasmodic complaints of various kinds: in palpitation and general irregularity of the heart: weakness and sensation of fainting. In dysenteric diarrhœa with scanty stool and violent tenesmus.

Among other Umbelliferae of which Clarke takes notes is *Heracleum sphondylium*. This has been proved and, in it, we see the same gastric upset with nausea, vomiting, colic, diarrhœa, etc. A characteristic is "headache with drowsiness < moving in open air, > tying up the head with a cloth". Exhaustion, indolence and weakness—all are there.

Athamanta oreoselinum is another remedy found in Clarke. It has the peculiar befogged condition found in *Æthusa*. The stupefaction seems to rise "like a vapour" from the lower part of occiput. The action on the liver is quite marked. Confusion, vertigo > lying down. Bitter taste and bitter mucus in air passages, icy coldness of hands and feet. This plant along with *Emperatoria ostrathium* belongs to the genus *Pucedanum*. The *Imperatoria* is said to cause diminution of the secretion of mucus in chest and bowel. The root is the

part mostly used. It has a domestic reputation in fevers and troubles of the head and stomach and promotes perspiration.

Celery : *Apium graveolens* has been cultivated from wild smallage and is now used as a flavouring vegetable or salad. We are indebted to the Italians for the perfection to which celery has been brought, and to them also is due our first knowledge of its culinary value. It was introduced into England about the middle of the 17th century.

Apium has had a proving of the tincture made from the seeds. There was produced "an unpleasant feeling in the stomach with belching". "A gone feeling in the stomach lasting for hours but partially relieved by eating." "Acute retention of urine. A peculiar symptom was "pain in sacrum < lying down > by walking about". Mentally there was a fidgety restlessness, and, in the chest, there was produced "intense constriction over the sternum with a drawing feeling through to the back also < when lying down.

When blanched, by being earthed up, the root is now, not only edible, but very serviceable to the housewife. Of it, Kettner, has said, "it makes a soup of itself. It makes a sauce of itself. It is excellent plain boiled or as a sea kale. It will stew to perfection and it makes a salad which is not only good in itself but is doubly good in that it may be had when other salads fail."

Parsley, *Petroselinum*, is the remaining important economic member of the group. From earliest times it has been the object of superstitious observance. It was dedicated to funeral rites by the Greeks who called it Selinon (the Moon Plant), after Selene the Moon Goddess, who was "Queen of the Dead". Later it was consecrated to St. Peter who, in Christian times, took over Charon's post of "Doorkeeper of Heaven". It thus became "Peter's Moon Plant" or Petroselinos.

As a seasoning and a garnish it has no equal, but medically its sphere of action is limited. Most of the benefit derived from parsley has been in genito-urinary disorders. "Sudden urging to urinate." Pain in the tract before and during urination. It is said to help in dissolving uric acid stones.

Another of the Umbelliferae with which St. Peter is asso-

ciated is *Samphire*. This plant grows wild among the rocks along the sea-coast. It is described as having a spicy taste, slightly salty, and was held in esteem as an ingredient of salads. An epicure, Gerard, has said of it "the pleasantest sauce, most familiar and best agreeing with man's body for the digestion of meat." The leaves of Samphire are not like the usual Umbelliferae, but are succulent and tapering, and, when pickled, were once in great demand. The entomologist, Lindley, has given the rather curious origin of the name Samphire. From growing among the stones it was originally known as "rock cress". From association of Rock with Peter it became known as Peter's Cress and then St. Peter's Herb—in Italian, Herba de San Pietro. The "herb" part was dropped and the San Pietro became in English, Sampier by which name the plant was earlier known. Later the Sampier became corrupted to *Samphire*.

These are the members of the Umbelliferae group which have been found most useful to us. I have left out much that you can find in the *Materia Medica*. There are one or two others which enjoy a domestic reputation, but which have not been sufficiently well proved. One, *Zizia aurea* has spasms of a chorea-like nature which have the peculiarity that they persist during sleep. There were originally two varieties of *Zizia* when Dr. E. E. Marcy proved it in 1855, *Zizia aurea* and *Zizia integerrimum*. Dr. Hale in his *New Remedies* got them mixed but this mistake was corrected in later editions, when notice was drawn to it by Dr. J. S. Douglas, in the 1870 *New York Transactions*. In the meantime, the botanists had changed the genus of *Zizia aurea* to *Thaspiums*. So now the original provings of *Zizia aurea* are belonging to *Thaspium aureum*. To complicate matters there is another species of *Thaspium* which closely resembles the Aureum, namely *Thaspium trifoliatum*. Dr. Douglas said "on the whole it must be considered a matter of uncertainty how many articles are sold under the name of *Zizia aurea*. It is quite certain there are at least two." He accompanied his article with two excellent plates, to help distinguish between the different plants, so perhaps things are better now.

In closing, I would suggest that one can best learn from a group of drugs by seeing what is common to the majority.

Generally, these symptoms are capable of being produced in all who take the drugs in sufficient quantity. In other words, they can be produced at will like vomiting, diarrhoea, drowsiness etc., and their intensity is relative to the size of the dose. They have been called the "absolute" symptoms ; everyone gets them. In addition to these symptoms there are others, which the earlier homœopaths called "contingent" symptoms, which depend on the special sensitiveness of the patient taking the drug. They cannot be produced at will and are obtained irrespective of the size of the dose. They are what Kent has called "strange and peculiar", and it is they which will guide you to the choice of the remedy. Do not try to learn or memorize the various schemes. They were arranged by Hahnemann in careful order from above downwards, and from within outwards, so that they might be available for ready reference. The idea of the *Repertory* was to carry this availability a step further. It is the "contingent" symptoms which will be found helpful when related to the absolute symptoms or what others call, the "nature" of the remedy, and these you will be expected to know when using the *Repertory*.

—*The British Homœopathic Journal*, Jan. '56

A CASE OF GOUT—COMPARISON BETWEEN COLCHICUM, LEDUM AND BENZOIC ACID

DR. ROGER A. SCHMIDT, M.D.

E. J., a 63-year-old Swedish overnourished male, called me March 2nd, 1954. He had been abed for four days with a recurrence of gout in his left knee. He had been stuffing himself with loads of aspirin, cinchophen and colchicine with very little relief. He had learned about Homœopathy by a satisfied neighbour and wanted to try it to end his torment. Profuse sweat