LECTURE TO
THE INSTITUTE OF PACKAGING

2nd December 1991

Good evening Ladies and Gentlemen.

My name is Tony Dweck and I am the Technical Director of Peter Black Toiletries. I am to Packaging, what Mahatma Gandhi was to hang gliding, and it may well be that you are wondering why I am here. You tell me!

It could be, that over the years, I have developed the knack of translating those difficult technical terms into a language that Marketing understands.

For example, when the annular ring supporting the feeding sphere of the roll-on antiperspirant is towards the low end of the specification, and this is coupled with the diameter of the said sphere being at the **top** end of the specification, then the friction fit tends to prevent the correct pick up of the product onto the surface of that sphere. The consumer perception is one of dragging and less than satisfactory performance with regard to the application characteristics, which in turn can result in underarm follicular damage and resultant soreness.

I have discovered that this can be more easily explained in Marketing terms by saying that "It's wonky, darling, and ripping the hair out by the roots of their armpits!" I may not know how to put it right myself, but I usually know a man who does. This seems to be an admirable compromise, since I can communicate on equal terms...namely, one of total ignorance.

But I digress!

I was requested to talk tonight on the subject of cosmetics and toiletries, this suits me very well since it is what I do for a living. I am also a keen Herbal archivist and spend much of my time studying wild plants and herbs. It is also my ambition to draw published literature together in order to substantiate the folklore surrounding the healing power of these plant materials, before Man in his infinite wisdom, destroys the environment in which they live. It is a task that I shall never live to complete, however, they always say that the impossible takes a little longer.

In the pursuit of this rather unique hobby, I have come across a number of interesting, if not bizarre, collection of useless bits of information.

Now I am sure that many of you are quite mystified by the plethora of weird and wonderful ingredients that go into your toiletries and cosmetics. So I wonder how many of you would like the Puppy Dog ointment concocted by an Englishman Gilbertus Anglicus, in the 15th. century. The recipe goes as follows:-

Take a very fat puppy dog and skin him; then take the juice of cucumber, rue and pellitory; berries of ivy and juniper; fat of vulture, fox and bear in equal parts; stuff the puppy therewith and boil him. Add wax to the grease that floats on the surface and make therefrom an ointment.

As recipes go, that is quite a complex mixture and we would have tremendous problems getting some of the raw materials, particularly the juniper berries which are only available for a relatively short season in the year.

Rue, pellitory and ivy are, of course, known skin irritants, and as a result, we would have to expect some potential customer complaints if we made this formula up today.

The major problem with this product would be the ingredient labelling for America, since I could find no listing in the CTFA Cosmetic Ingredient dictionary for Puppy fat. Nonetheless, this would be a sterling product for our new class of citizen - the Downwardly Oppressed and Puberty Expected, or let us say, DOPE for short.

There are some other remarkable facts that came to light, take White Waterlily or **Nymphaea alba** for example, it is an attractive perennial pond dwelling plant that has been surrounded by controversy. However, it is now considered that the plant does depress sexual activity. In fact, the plant has been nicknamed "The Destroyer of Pleasure".

Think of the implications, if you will. At some stage there must have been some nice little man, who was being fed all manner of strange "vegetables", in order that his wife could discover how to have a good night's sleep.

Well I'll tell you one thing, with a computer data base full of herbal research, sitting in my study at home, you won't get me eating any strange looking cabbage.

But I have got some bad news men, hops, which incidentally, were introduced to England by the Dutch in the 16th century, also act
as an anaphrodisiac (before we get excited, an anaphrodisiac is the opposite of an aphrodisiac).I suspect that many of us know this condition by another name. The moral must be....to drink lager in future!

To see where it all began, let us go back in time to the dawn of Man. Picture the somewhat harsh environment where the women collected and foraged for wood and edible plant material, cared for the children and prepared the food. The men were the hunters and did the heavy work.

This I hasten to add is not male chauvinism, this was the reality! It can only be presumed that even in the earliest of ages of man, the knowledge of plant material extended beyond the edible and that some medicinal virtues must have been known.

Later, indeed much later, man began to domesticate his cattle and began the rudiments of farming.

The new society, more cooperative and efficient, brought about new needs for the people. The need to forecast the seasons and to know when to plant the crops, sowed the very seeds of early religion. With religion came the ceremonies and rituals, many of which depended on the use of plant material for their incense and for their offerings.

Herbalism must have worked, since the very lives of the herbalists would have depended on the success of their art. The dosage rates of plants such as Belladonna, Henbane, Hellebore, Aconite and Monkshood are critical. Too little and the remedy is ineffective, too great and a paying client is lost forever!

Neighbouring settlements traded in ideas and information, with more plants being added to the growing list of remedies and cures. Remember also, that their skill was not restricted to the purely medicinal areas of wounds, coughs and colds. They were also in great demand for aphrodisiacs and love philtres. It is also to be expected that they would have been asked for abortients and douches as a drastic solution to these potions.

With growing communities and the herding of people and animals would come disease. The day of the herbalist had arrived.

In these early days of plant medicine, the story would have been the same, whether in the land of the Incas, in an early dynasty of China or in the great pharaonic period of Egypt. The events of herbal development would have followed much the same path, albeit that they were many thousands of years and many thousands of miles apart.

The most dramatic event to occur was the advent of the written word, a time when spoken teaching could be supplemented and at the same time be transmitted over greater distances. It was an era when each of the great civilisations produced the very foundations on which modern medicine and cosmetics were to be built.

The Ebers papyrus is one of the earliest medical documents in existence. Even today we are trying to relate the hieroglyphics to the actual plant material.

It is an exercise that will occupy botanists, herbalists and archaeologists for many generations.

Don't think for a minute that the ancient Egyptians had discovered all the secrets, or that their definition of natural material was restricted to plants and flowers.

Let me give you an example (which I have taken from the Egyptian Herbal by Lise Manniche).

From a reference in the Ebers papyrus (1550 BC.) there was a hair tonic prepared from a red mineral, Myrtle (**Myrtus communis**), kohl, oil or fat; gazelle dung and hippopotamus fat.

Not the most appetizing mixture I hear you say! However, myrtle has a most wonderful and powerful scent if extracted properly. It was used in the last century in a fragrant preparation known as Eau d'Agnes. In addition, Myrtle is a powerful extract for skin eruptions, eczema and sores and so would have been an ideal choice for an hair tonic.

Gazelle dung, though abhorrent to our culture, is rich in numerous enzymes and bacteria which could work in ways unknown to modern man. The smell would be no worse than, say, civet or

musk, which were widely used in modern perfumery up until quite recently.

As to the hippopotamus fat, the cosmetic world was using spermaceti and whale oil in this decade.

All at once the formula doesn't look quite so silly any more.

Let us stay in this fertile land a little while longer.

The ancient Egyptians discovered that plants contained elements that today would be described as antimicrobial, antioxidant and preservative. They used this technology to excellent effect in their embalming, a secret that we have yet to completely unravel.

In their incense they discovered that blends of natural oils and plant material produced states of euphoria and could lift the mood. One blend in particular called Kyphi, was a blend of some sixteen materials and was burnt in the temples. It is a formula that has survived through to today, thanks to the writings of Pliny and Theophrastus.

Don't tell me that osmotherapy is new! Quite simply, we have forgotten how to use the most powerful sense that we were born with.

It was known that anointing the body with oils was both pleasurable and beneficial. Aromatherapy was known before the birth of Christ, and yet it has taken centuries for this ancient art to be rediscovered. It will take another decade before it achieves the wide recognition and acceptance that it deserves.

The ancient Egyptians did not get everything right. Their use of cadmium, arsenic, plumbic and mercuric salts to achieve colour in their cosmetics was a deadly mistake. However, their understanding of Henna as a hair dye and nail colorant was safe and very sound.

But we have stayed too long in the fertile and fragrant land along the Nile, it is time to move to another time and another culture.

Around about the 15th and 16th century there grew up the belief known as the Doctrine of Signatures. Basically, this meant that the plant itself gave some clue as to what it might treat medicinally, purely from its physical appearance.

Foremost among the defenders of the Doctrine of Signatures was Philipp Theophrastus Bombastus von Hohenheim (better known as Paracelsus), who said that we recognise the signatures instinctively: "The mind need not concern itself with the physical constitution of the plants and roots.

It recognises their powers and virtues intuitively thanks to the signatures they carry".

This is probably best explained with a few examples.

Let us look at Heartsease or Wild Pansy, **Viola tricolor**. The lower leaves are heart shaped, and so the Doctrine stated that this plant should be good for the heart. In fact it is a heart tonic, and has been used in cases of heart failure.
Self Heal or **Prunella vulgaris**, the corolla is shaped like a bill hook. It is also known as Carpenters' herb. This plant should be good for wounds caused by scythes or similar implements. It is in fact a vulnerary (or wound healer) and helps stops bleeding.

Celandine or **Chelidonium majus** has a bright yellow juice and so should be good for biliary conditions and jaundice. It is an antispasmodic, it reduces inflammation of the biliary ducts and has been used successfully for the treatment of jaundice.

Walnut or **Juglia regia** looks like a brain and so should be good for headaches or mental disturbances. It isn't!

Strawberry or **Fragaria vesca** has heart shaped leaves and so should be good for the heart. It isn't!

Eyebright or **Euphrasia officinale** has spots on the flowers that look like blood-shot eyes. It is, in reality, a superb plant for conjunctivitis, sore and inflamed eyes and makes an excellent eye wash.

Willow or **Salix alba** grows in damp places, because of this it was assigned under the Doctrine to be valuable for conditions caused by the damp, for example rheumatism. The willow bark was prescribed and worked. Modern technology investigating the reasons for the success found a glucoside called salicin from which salicylic acid or aspirin was derived. Other plants which have also been helpful in rheumatism have also been found to contain salicin (for example wintergreen, birch bark and members of the **spiraea** group)

The theory does not work all the time, but still has some merit, that I for one, am examining in some detail.

Well it wasn't too long before the Great Plague of London was to come along, and I am afraid to say, that the herbalists didn't do too well. The cause was unknown, but the effect was all too well understood. We all know the nursery rhyme:-

"Ring a ring a roses"

The first physical signs of plague were shown by the appearance of rose like rings of ulcerated skin.

"A pocket full of poses"

The floral get well message.

"Atishoo, atishoo"

The final stages of plague, which was congestion and flu' like symptoms.

"All fall down"

Which was death.

The very fact that we all know this childhood rhyme, is testament to the way in which information has been passed down from generation to generation.

Talking of the plague leads to a rather nice anecdote. It should be remembered that most of the major cities that had developed and grown faster than their antiquated (or in some cases non-existent) sewage systems had rat associated pestilence problems.

There were four thieves operating in the city of Toulouse (or Marseilles depending on which account you read). They had established quite a profitable little business which relied on the plague providing them with additional customs. As the plague claimed another victim for burial, so these ghouls would enter their homes and loot them.... and so the situation continued until the law caught up with them, found them guilty and sentenced them all to death.

No doubt the men had prepared to meet their maker, when the authorities had a sudden change of heart. The reason for this was quite obvious, they needed to know how these men had managed not only to survive the plague, but has actually courted danger in the very heart of it with apparent impunity.

Their recipe for their success, which has survived through to today, contained thyme, garlic, sage, lavender, rosemary and rue. It was the revelation of this formula that gave the men not only a reprieve from their death sentence, but also their pardons and freedom. Though all these materials are undoubted antiseptics and sterilants, I believe that these four rascals were lucky on many counts.

Such an event is often used as an argument against the success of herbalism, and yet, even when modern man knows the cause of disease, he is often unable to react quickly enough to prevent it from proliferating. We still have cholera epidemics today.

We have all come across one Old Wives' Tale or another in our time. The one that immediately comes to mind is.....

"Eat up your carrots, or you won't be able to see in the dark!"

I wonder how many of us had the frighteners put on us by our Mothers, in order that we might be coerced into eating the over generous portion of **Daucus carrota**.

Did they honestly think that we would be taken in by such archaic twaddle? If it was so jolly good, why did Granny wear glasses? Answer me that!

And yet, it is absolutely true. Granny might have been wearing glasses to compensate for her weakened powers of focus, but in the dark she could have run rings around me. He who could hide a whole carrot under his knife and fork.

Her retina, with the benefit of the Vitamin A present in carrots, produced more visual purple. More visual purple and she had improved her night vision.

That is a proven scientific fact.

I have no doubt that she would have told my Mother that plastering her face in mashed up carrots would help her to keep her skin soft and free of blemishes.

As messy and unappealing as it must have been, countless generations did exactly that.

Again the benefit has proven scientific fact, and I have documented this proof in the preprint.

Let us look at the benefits of Roman Chamomile and German Chamomile. It is well known that the **Anthemis nobilis** contains a very rich source of azulene and the **Matricaria recutita** a very rich source of bisabolol. It comes as no surprise to learn that both these materials have received considerable attention and been shown scientifically to have excellent skin healing effects.

The healing effect of comfrey **Symphitum officinale** has been known for generations, in fact since the time of the Crusaders. Apart from the bone setting qualities, it is also extremely good for helping the skin to heal. Again, analysis has shown that the herb contains one of the highest contents of any plant of allantoin and vitamin B12. Both of these materials have been clinically studied and proven to have beneficial skin effects.

Everyone knows that **Urtica urens** can give a nasty and irritating sting, this is due to the very small barbs that the leaves and stems have as a covering. The stinging nettle really is an evil little beast, and those barbs contain formic acid, a known skin irritant. I feel confident that if I asked anyone here this afternoon, what was the cure for this rash, that most would say, look for a Dock Leaf. Right answer!

The Dock leaf is a sorrel, specifically **Rumex obtusifolius**, and it is indicated (as with others of the sorrel family) for skin complaints, skin infections, skin irritation, eczema, acne, boils and swellings. So with a nettle rash, it is not a bad choice under the circumstances.

An Old Wives' Tale or a scientific fact, I put it to you that this is a proven scientific fact. We all know it works, and so do all of the references. Now try buying it from the Chemist!

Which now leads me on to another extract.

Evening Primrose, not related in anyway to the Primrose or Cowslip of the Primula species, but **Oenothera biennis**, a plant introduced and naturalised in this country in the 17th. century, and which can be found growing wild by the roadside and in seaside areas. In fact it enjoys such rugged conditions that it has been planted on the sites of old gravel quarries as a cash crop.

This is a real success story, and shows how modern technology can prove something that

everybody knew in the first place.

The consumer had been consuming the oil in capsules and applying it in creams for a number of years. It had developed quite a cult following, of people who liked the effects of this pretty flower and the oil that it seeds contained.

Now Evening Primrose had always been recognised for a number of benefits, and in the 70's it was recognised that one of the ingredients was GLA (gamma linolenic acid), I don't want to go into all the chemistry, so let's just say that it is a biologically very interesting material.

It was thought that GLA had a very special effect on the skin, especially in cases of eczema. It was only when they came to look for natural sources of GLA that they discovered that Evening Primrose seed oil contained one of the highest levels.
Had they looked a little further they would have discovered that there are a number of plants which have even higher levels, such as Borage and Comfrey.

Anyway, to cut a long though fascinating story short, they tested Evening Primrose Oil in a clinical trial and discovered that indeed, the oil was good for cases of eczema. The product now has a Product License number, and is available by prescription.

But there are other discoveries in the pipe line.

There is a plant in ayurvedic medicine called Neem or Nimba, which is also known as Margosa or **Azadirachta indica**. This plant has been used in India since earliest times as a skin antiseptic. I have been collating the use of plants as antiseptics for some time.

It was, therefore, a very pleasant surprise, when I received some literature from a company, saying that they had discovered a preservative derived from a natural plant oil. Furthermore, that it would satisfy the British Pharmacopoeia challenge test criteria at levels that would not be unreasonable.

On further examination, it turns out that this preservative is none other than Nimba. Now this turns out to be a two edged bonus, not only would it be a new preservative, but it would also be a skin anti-inflammatory.

And there we learn yet another lesson from nature. The active ingredients that achieve a desired effect, often give serious side effects. These might be irritation, allergy or skin sensitisation. It is so often the case, in the study of natural materials, that one discovers that nature includes an antidote or desensitiser within the mixture.

Don't get me wrong, I can give you countless examples of cases where nature includes phototoxic materials or irritants, such as bergapten in bergamot oil or papain in pineapple juice.

At the introduction to this talk, I mentioned that plants and medicinal extracts have similar properties attributed to them regardless of their geography or culture. In the preprint you will

notice that I have taken Fenugreek or **Trigonella foenum-graeceum**, which is also known as Greek Hayseed.

Generally speaking it is a healing agent, a weak aphrodisiac, a carminative and it also increases lactation in nursing mothers.

Now I'm not saying that all of the references claim all of these properties, indeed, most of them have a number of other uses as well. However, in the most part there is tremendous correlation.
In India it is known as Methi and in Sanskrit as Methika and it is considered carminative, aphrodisiac and healing. It is also considered to be good for hair loss.

In Java it is reported for use in hair tonics and to cure baldness.

In England (where it was introduced in the 16th century) it is known as Bird's Foot and Classical Greek Clover and is thought to be healing, carminative and lactative.

In Ireland it is used as an healing agent.

In Egypt it is known as Helba and throughout the Middle East it is believed to be carminative and healing.

In Europe (where it was introduced in the 9th. century) it is used as an aphrodisiac and healing agent.

In the Mediterranean (where it is a native plant) it is commonly known as Greek Hayseed and is used as a carminative and healing agent. It is also used in the synthesis of sex hormone preparations.

In China (where it was introduced in the 10th century) it is used for impotence and other male problems

In America,.... well I am sorry to say that our friends have let us down badly here - they use fenugreek for flavouring imitation maple syrup!

But I hope you would agree that this is a very interesting piece of substantiation. It shows that it does not matter whether the plant was native to the area or whether the plant had been imported and established. The success of the plant must have been tried, tested and proven, or else the claims would not exist today.

Now as I said earlier, I am not an expert in packaging matters, but I am nonetheless, honoured to be speaking here in these lovely surroundings to such a distinguished audience.

Since at least 50% of you are already in the Packaging industry, I will tell the story of a typical development from the point of view of one who knows nothing about it. I may be guilty of

guilding the lily along the way, but Christmas is coming....that is, unless our marketing department have postponed it.

So where did packaging all start?

It started with God.....and I am afraid to report that he made same pretty bad mistakes.

The egg that will not cook in the microwave, does not pass the transit test either. In fact, if he had invented a chicken with a square bottom, we would not have had to invent egg racks to stop them rolling off the work surface.

The coconut as a drinks container is far too difficult to open, and he might have considered using a ring pull to make life easier. To be honest, I think he was being a bit too clever for his own good to try and pack a snack in the same container. I think it must of been a bad day all round when he invented the coconut, because his choice of the front door mat as a wrapper was definitely weird.

I thought the idea of the tortoise pastie was brilliant, but combining the pastry and the outer carton was a bit short-sighted, and definitely tough going on the tooth enamel. But again, you must commend his foresight into the after use of the packaging as a safety helmet for cyclists.

The technology that went into the orange was superb, it was incredibly clever the way in which he stopped the juice from sloshing about, but then he went and spoilt the idea by putting pips inside. Who wants a free necklace in their drink anyway? He also made a mistake on the carton, which inevitably squirts the user in the eye with an irritant spray when it is opened. This, he should have realised, could cause some legal problems in the future. Very definitely a product that should have had some sort of warning label printed on it.

Now I dare say that I could carry on in this vein pretty well all night, but it should be remembered that God achieved this and a great deal more in one week. Compared to the Packaging team at Peter Black, he did pretty well.

We are, however, under a bit of pressure with this recession, and I have to say that we have been placed under considerable strain by the latest economy. Someone has turned off the light at the end of the tunnel.

But back to the presentation.

Let us look at the development of a gift pack. The name itself is not without problems. It may also be called a coffret, or a composite pack, or in the case of an unacceptable design - it is sometimes referred to as a disaster.

Basically, it works like this.....

Marketing choose a "composition" of products that can be sold together as an attractive variety of toiletries. They usually select as wide a variety of shapes as possible, so that even the winner of the Crypton factor would have problems in arranging them into a configuration that would look attractive.

Just to make life more interesting they add what we call the "nobble factor", this might be the incorporation of a Spanish Terracotta wall planter weighing a Kilogramme with two fragile bath cubes, a sachet of pot pourri, a sweet little Father Christmas blown out of the finest and most delicate Venetian glass, attached to a bottle of foam bath.

It makes Mission Impossible look like a piece of cake.

So let us look inside the heads of all the team members as we move into the product development cycle.

The Marketing perception looks like this.....

SLIDE ONEAN ELABORATE RIBBONS AND BOWS CONSTRUCTION

The Customer has a vision that looks like this....

SLIDE TWO ANOTHER ELABORATE CONSTRUCTION BUT TOTALLY DIFFERENT IN COLOUR AND DESIGN

The Packaging Technologist visualises.....

SLIDE THREEA SOLID REINFORCED TOTALLY SECURE AMMUNITION BOX

The Production Manager sees the design as.....

SLIDE FOURA STOUT CARDBOARD CUBE WITH NO DECORATION

The Accountant has a very novel view....

SLIDE FIVE A PAPER BAG WITH A BOW ON IT

The Technical Director, that's me.....

SLIDE SIXA CUSTOMER COMPLAINT LETTER

Yes, it is certainly reassuring to see the whole team moving forward as one body, intent on achieving a successful launch.

We then begin the task of briefing the packaging suppliers, and I cannot tell you what a blessing it is, that all we have the same mental picture of the final package.

The first stage of any development is to produce a mock up, this is an effective way of letting your customer know that everything is under control. It is also a chance for the Packaging technologist to prove that in his youth he was an avid viewer of Blue Peter.

The trick is to use as much existing componentry as is available. This leads to an abundance of toilet tissue in the lavatory, as the central cardboard roll becomes a vital part of the engineering in the construction of the packaging. Other mysterious events occur, like the cleaning lady can't find her washing up liquid. The Managing Director's Financial Times Diary develops holes in the leather-look cover.

It is the time of great industry and tremendous invention. It is the time when the one and only "imported at great expense from Spain" terracotta wall planter in the whole of England decides to crack.

To the seasoned campaigner (well versed in Sod's Law) it comes as no surprise when the head falls off of the unique Venetian glass Father Christmas.

It is, indeed, a time that gladdens the heart of Bostick and Araldite.

There is amongst this catalogue of disasters, one small kernel of satisfaction, ... the foam bath didn't leak.

Anyway to cut a long story short, the final design looked totally different to any of the ideas that anyone had in mind, because the wife of the Chairman of the number one customer decided that a nice geometric black and white check was "absolutely wonderful darling", but we have to say that it didn't do an awful lot for the "Extracts from Granny's garden" theme.

All the while that we have been developing the product, the critical path has been slipping away from us like a soap lost in the bath.

For those of you who don't know what a critical path is, I will spend one minute in definition.

A critical path is where all the team members decide, on a technical and production basis, where the key dates for certain events must occur, in order that the product reaches the customer on the date that we promised it.

The Marketing department think it is the fastest ski track through a piste.

Sorry! Back to the story.

Once we have taken the final submission in for the 23rd. time, having had Father Christmas in the terracotta planter, peeping round the foam bath bottle, sitting on the bath cube, crushed to death by the bath cube, with a ribbon round his neck, with a bow stuck on his head, with a crimson red cloak, with a pillar box red (but not too GPO dear) cloak and a let's just look at a little fairy for fun. We have to test that the packaging is strong enough to support the delicate contents contained within.

Test number one.

Part 1

Drop the box containing six gift packs from a height of 3 feet onto solid concrete. Pick up the box, turn it through a right angle and drop it 3 feet onto solid concrete again.

Part 2

Inspect the box. Well it didn't look as good as it did when it started the test. In fact, to be honest, it was quite distressed.

Part 3

Inspect the contents. No great surprises here! A genocide as far as Father Christmas was concerned. Five decapitations and a death by suffocation in a bath cube (or it might have been the shock of losing both legs and having a terracotta wall planter stuck up his bottom).

The rest of the composites were a cross between Hiroshima and an explosion at Bill and Ben's flowerpot.

You may find this all quite surprising - we did too!

However, with a doubling in cost of the packaging materials, the subtle use of expanded foam polystyrene, the incorporation of extra vacuum formings and plenty of sticky pads, we achieved our objective and the pack survived the first test.

We had now arrived at test number 2

Send the product in its final packaging to the customer's warehouse, let him send it to one of his stores, and we go and inspect it.

Not a lot to report here, because it never arrived at the store, in fact it never seemed to arrive anywhere. To date it hasn't arrived, though there was rumour of a sighting in Glasgow, so that was that.

In order to give it road mileage we eventually sent a few transit cases to our factory in Swanage, who sent it back to us, and we sent it back to them and they sent it back to us and we returned them back to them and they sent it back to us and then we opened them up and looked at them.

Santa was worn out, one of the worst cases of travel sickness that I have ever seen. His little bobble was thoroughly worn out through chafing against the terracotta wall planter.

We considered our universal cure of using a sticky pad, but it looked as though he had a loaf of bread stuck on his head. The team pondered long and hard, meetings were held in the canteen so that the smokers amongst us could call on the power that a much needed influx of nicotine could bring.

It was evident, as the hours became days, that our chubby little man, our much beloved Father Christmas, the very symbol of Christmas - was proving to be an absolute pain in the thingummy.

We decided to hold a brainstorm. This is when a selected team of six people from different backgrounds sit down and think laterally. A seventh person writes down all the drivellings until the six are totally drained of anything to say, sensible or otherwise.

Marketing really enjoy these sessions, they see it as the only time when the Technical department speak their language. Since the use of criticism is totally forbidden, because it totally destroys creativity, the occasion is of double enjoyment for them.

However, the technique inevitably yields results, and the protection of Santa's bobble from an ignominious end was achieved by a very simple solution. We made him redundant and replaced him with a cardboard neck tag. This had the advantage of reducing the cost whilst solving all the problems.

The product went into stores at Christmas, on time, of the right quality, fully researched and as popular as pork sausages at a Bahmitsva.

We had the usual number of complaints, and I would like to give you the profile of a typical complaining customer:-

She is married to a Barrister or high ranking legal official.
The furniture is always French polished and always Louis the umpteenth. The jumper is always kashmir and the dress always silk. She always buys her clothes from Harrods, her underwear from Emmanuels and her jewellery from Cartiers. BUT she never seems to buy her foam bath from Chanel.

She is clumsy and unlucky to the extreme, she never reads labels, has skin as delicate as rice paper and children who will eat anything that is in a bottle regardless of how nasty we make it taste.

She always opens her nail varnish, foam bath and loose face powder in the middle of the lounge while standing on the Chinese carpet. The product always hits a small, but ever so precious table first and strips off the polish, it then splashes up the silk dress, over the hand printed wallpaper and onto the priceless carpet. Her attempts at cleaning up the mess always add to the catalogue of disasters.

"I tried sponging the table with white spirit, but the foam bath had already left a mark."

I would like to read you a typical letter from a customer about a hand cream. However, I must

explain that we include a very bitter substance in our products to discourage their ingestion by children.

Dear Sir or Madam,

I am very disappointed with the hand cream that I bought from your store. I licked my fingers after applying your cream and it tasted horrible. I gave some to my husband and two children to try and they all agreed that it tasted very nasty.....

One wonders where do these crackpots come from?

Dear Sir,

I stood your Terracotta Wallplanter on our Mahogany table in the Dining room and it has badly scratched the surface. I tried polishing the table with your furniture polish, but the scratches have not come out.

What is to be expected from a thing as heavy and rough as a house brick? After all it's a tin of furniture polish, not water from Lourdes.

I guess that at the end of the day, I am not very good with customer complaints.

I'm also very poor at knowing when to stop! but I hope this brief snapshot of the cosmetic and toiletries industry has shown you how we need to be historians, herbalists and humorists in order to develop a new product.

Mr. Chairman, Ladies and Gentlemen, I thank you for listening to me and will take any questions that you may have.

Thankyou.

Paper
to
The Society of Cosmetic Scientists

November 1991

Good Afternoon Mr. Chairman, Ladies and Gentlemen.

My name is Tony Dweck and I am the Technical Director of Peter Black Toiletries. As a hobby, and an obsession I would describe myself as a herbal and medicinal plant archivist. That is to say, I collect information on natural plant material and then dissect it to see if there is any justification for the claims or reputation made on that plant. As a cosmetic chemist I find this fits in quite well with work and it also gives me a good excuse for having a computer at home, and not having time to do the dishes.

I found a picture that best describes the way I feel some days, as I cart my data backwards and forwards. This plate comes from A Country Herbal by Lesley Gordon and is a travelling country apothecary depicted in an 18th century French print.

SLIDE ONE P.67

I am hoping that computerisation will reduce my load to something more manageable. In keeping with the creativity of technical people you will no doubt notice the use of the floppy disks as ear warmers.

SLIDE TWO Cover

But between you and me, things look like getting worse. And I could see me being told to pack my bags and to take my home made wine with me!

SLIDE THREE P.43

The use of flowers as emblems or florography, let's call it by the romantic name of the language of flowers, was fashionable in the Middle Ages. It was used at a time when the need for a chaperon meant that messages had to be passed secretly and discretely. I would like to start my lecture with a simple bouquet of a few flowers. These would include

Burdock for persistence - I shall not be discouraged. Cineraria for delight - I enjoy being in your company.
Nasturtium for affection - I prefer natural looks and charm.
and

Begonia - WARNING, we are being watched!

The last time that I lectured at a Society symposium was at the one day conference on naturals. On **that** day I took the stance of the Devil's Advocate and had quite a scathing view of the data available on plant and medicinal material.

Don't misunderstand me! I still believe that much of the published information is poorly researched and over copied. I further believe that we are in danger of losing much of our knowledge unless a conscientious effort is made to draw the information together and sort out the fact from the fiction.

So what does the year 2001 hold for natural materials? How will we go forward naturally?

I am absolutely convinced that the bounty of nature offers real benefit for cosmetics and toiletries, whilst offering an honest profit.

There are a number of manufacturers who make a dishonest profit by using levels and quality of plant extract that would have no beneficial or medicinal value whatsoever. This drive - for cash at any cost - will of course be killing the goose that is laying the golden egg, and destroy the justifiable faith that the consumer is placing in natural products.

Rudolf Fritz Weiss says that bibliographical proof is an acceptable means of satisfying the efficacy of a plant material, provided that such proof includes the positive and negative reports. My approach to natural materials is through exhaustive surveys of the literature and weighing up the pros and the cons.

The Alexandrian sage Jesus ben Sirach coined a phrase some two thousand years ago that roughly translated, reads:- "God created the plants that heal, and a sensible man will not despise them". I fully believe in that sentiment and will attempt, in the short time available to me, to make an optimistic case for the future.
Let us look at the reasons behind the future success of these natural materia medica, and what evidence exists.

There are three main criteria.

Firstly, the historical evidence - which I shall be discussing in a minute.

Secondly, the geographical and cultural evidence, which includes folklore and old wives' tales, and...

Thirdly, the modern scientific evidence for the value of herbs and extracts.

The preprint takes each of these areas and considers in depth a number of specific botanicals, in this afternoon's lecture I shall be taking a much broader and wider ranging view.

I have stood here for 40 minutes to try and convince you all that the future must go forward

naturally. There are some wonderful plants and materials that I have not had time to tell you about.

I know that there are many thousands of plants that have never been fully documented, and the people that know their secrets are either taking those secrets to the grave, or leaving their villages in order to follow western culture.

Anthropologists, Herbalists, Homoeopathists, Aromatherapists, Archaeologists, Pharmacognacists and Botanists, to name but a few, help to keep the natural world alive.

The tremendous increase in sales of herbals, plant books and books on natural cosmetics and alternative medicine, proves that the interest in naturals is there.

People like Dr. Malcom Stuart, Curator of the Cambridge Physic Garden is attempting, with similar minded people, to preserve the genetic stock of our medicinal plants. This facility has opened this year. He has also set up a team of consultants to further the aims of herbs and medicinal plants.

There are a number of ways in which we, as an industry, can help preserve the future, and at the same time preserve a small part of the environment.

Firstly, insist on plant extracts of a medicinal quality.

Secondly, use levels of extract that will be of benefit to the skin, and not only to the pack copy.

Thirdly, seek out new extracts and so encourage exploration.

Through the simple economics of demand we can create supply. It is supply that creates profit, and I make no apologies for using the word profit. It is the profit that generates investment, which funds the research from which comes knowledge.

If your customer discovers that their faith in your product is nothing more than another advertising bandwagon, then there is no natural future.

I personally hope that there are a few more success stories like evening primrose oil to encourage more investigation into plant material.

I started my lecture with a bouquet from the language of flowers, and so I would finish in the same way but this time with a simple tribute of Wormwood and Blue Flax.

Wormwood, which stands for sorrowful parting - Even the best of friends must say farewell, and Blue Flax which says that I am touched by your kindness.

Mr Chairman, Ladies and Gentlemen, thank you for listening to me this afternoon.