

**THE ADVENTURES OF ARCHIBALD HIGGINS**

# **THE ECONOMICON**

Jean~Pierre Petit



Translated by John Murphy

The Association Knowledge without Borders, founded and chaired by Professor Jean-Pierre Petit, astrophysicist, aims at spreading scientific and technical knowledge in as many countries as possible and in as many languages as possible. To this end, all his popular scientific works, which cover a period of thirty years, and more particularly the illustrated albums he has created, are now freely accessible. Anyone is now free to duplicate the present file, either in digital form or in the form of printed copies and circulate these copies to libraries, within the context of schools or universities or associations whose aims would be the same as the association, provided that they do not derive any profit from this circulation and that they do not have any political, sectarian or confessional connotations. These pdf files may also be put on line in the computer networks of school and university libraries.



Jean-Pierre Petit intends to create numerous other works which will be accessible to a larger audience. Even illiterate people will be able to read them because the written parts will “speak” when the readers click on them. Thus it will be possible to use these works to support literacy schemes. Other albums will be "bilingual" in so far as it will be possible to switch from one language to another selected language with a mere click. Hence another tool made available to develop language skills.

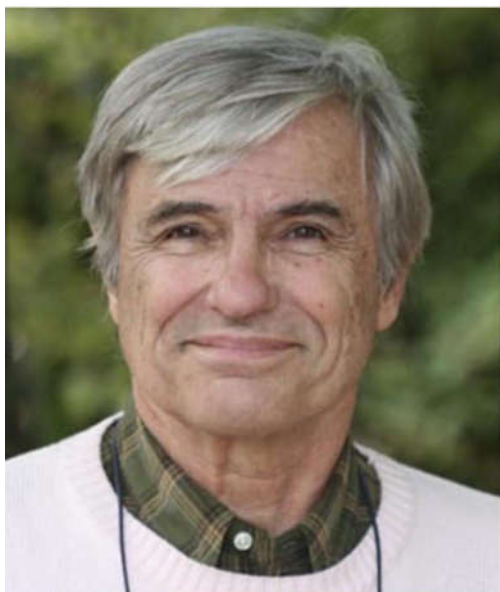
Jean-Pierre Petit was born in 1937. He made his career in French research. He worked as a plasma physicist, he directed a computer science centre, he has created softwares, he has published hundreds of articles in scientific magazines, dealing with subjects ranging from fluid mechanics to theoretical cosmology. He has published about thirty books which have been translated in numerous languages.

The association can be contacted on the following internet site:

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Jean-Pierre Petit



Gilles d'Agostini

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# PROLOGUE

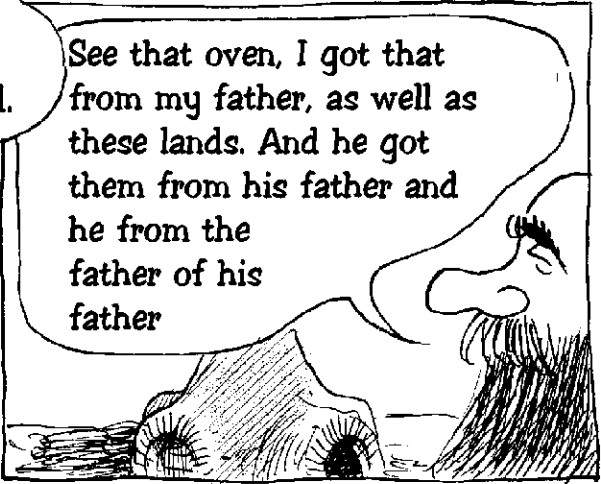
Once upon a time in Borderia...



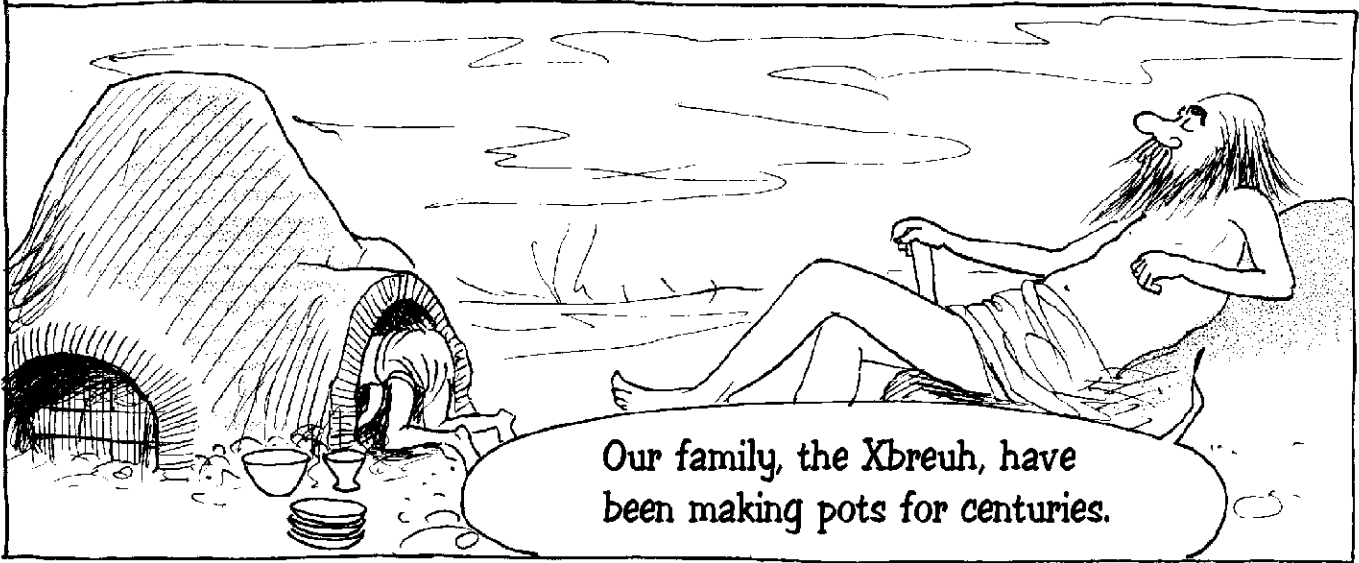
Poor lad he spends all his time throwing pots

Here you are master

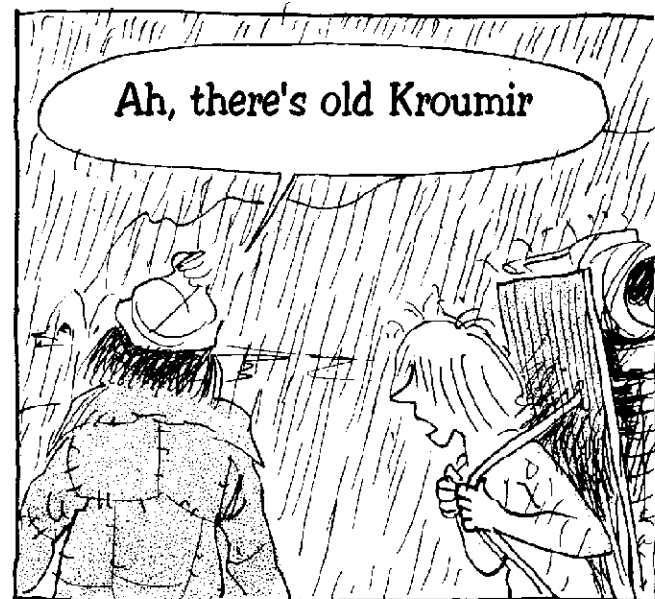
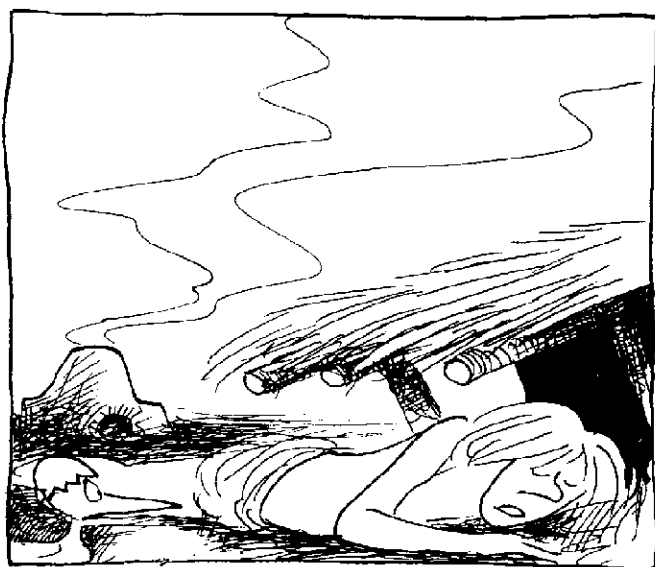
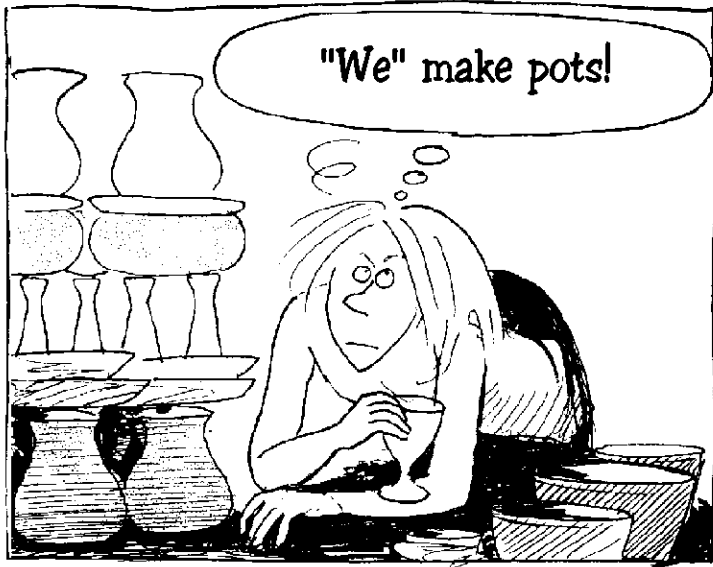
Good, when they're dry you can put them in the oven. Go and get some wood.



See that oven, I got that from my father, as well as these lands. And he got them from his father and he from the father of his father



Our family, the Xbreuh, have been making pots for centuries.




## EXCHANGE

Come on, four fish for a pot.



No, six!

They'll be a while  
**SETTING THE RATES.**  
You OK?

Pah, it's me that catches the fish for him.



and he leaves me just about enough to avoid dying of hunger. But what can I do? The river belongs to the caste of Kroumirs, and I'm just a Teuhl. According to the LAW, only the Kroumirs can exploit the river that the god Kefal gave them.



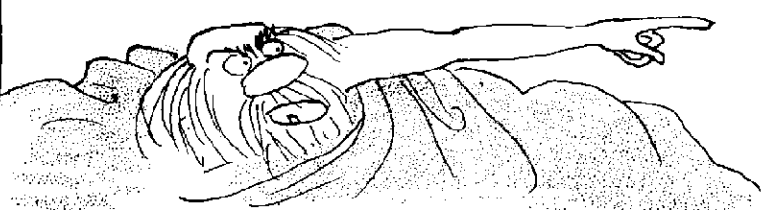
Yes I know, we've got a similar thing in Borderia.



Here!

Life continued in this way. The Borderians who knew how to make pots exchanged them with the Kroumirs for fish. The Poloks from the south brought them salt. With the salt they could salt the fish and put them in pots which allowed exchange with the Poloks. As for the Poloks...

**ONE DAY...**



Damned rheumatism!  
You'll have to go alone to the Kroumir with the pots. But so as they don't cheat you, I'm going to teach you to **COUNT**.



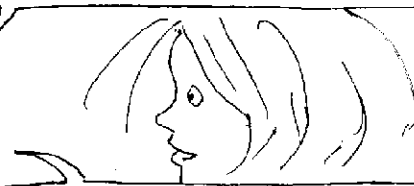
To what?

# ACCOUNTING

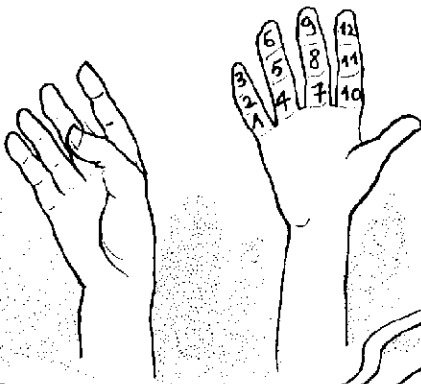
I'm going to teach you the **SECRET OF FINGERS**. Listen, stupid, can you see your hands? There are fingers on them aren't there? And each finger includes joints?



I shouldn't be teaching you this but if I don't, the Kroumir will cheat you like a blind kid at a poker party.

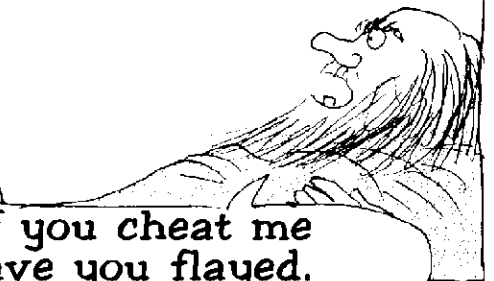


And I don't like to be cheated.



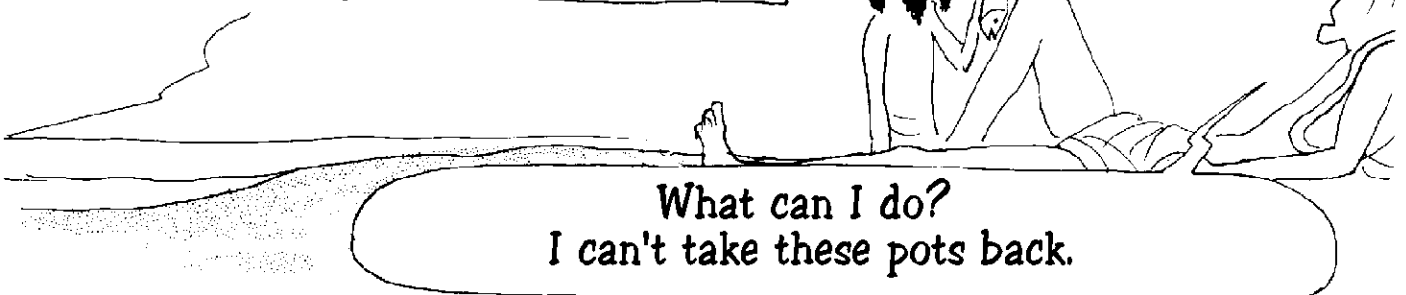
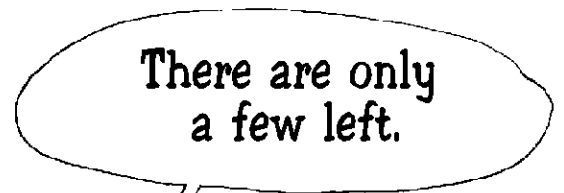
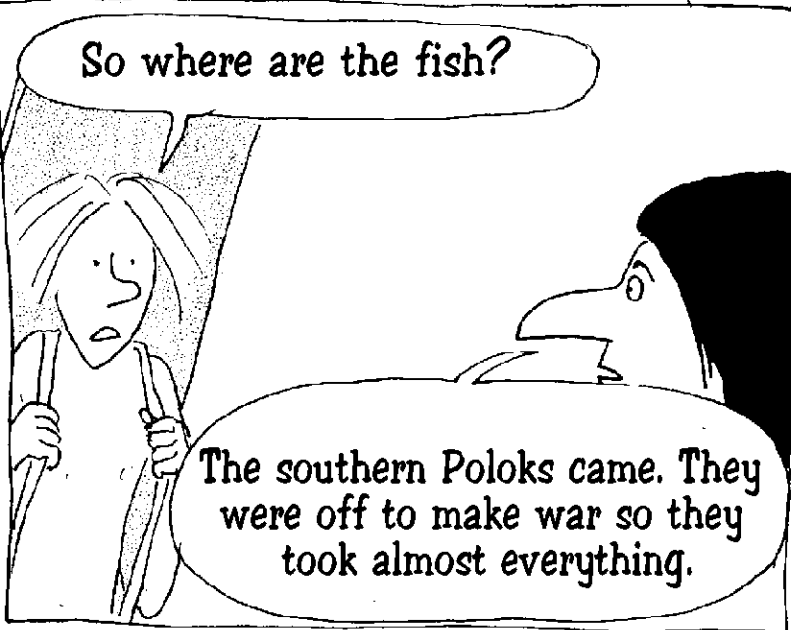
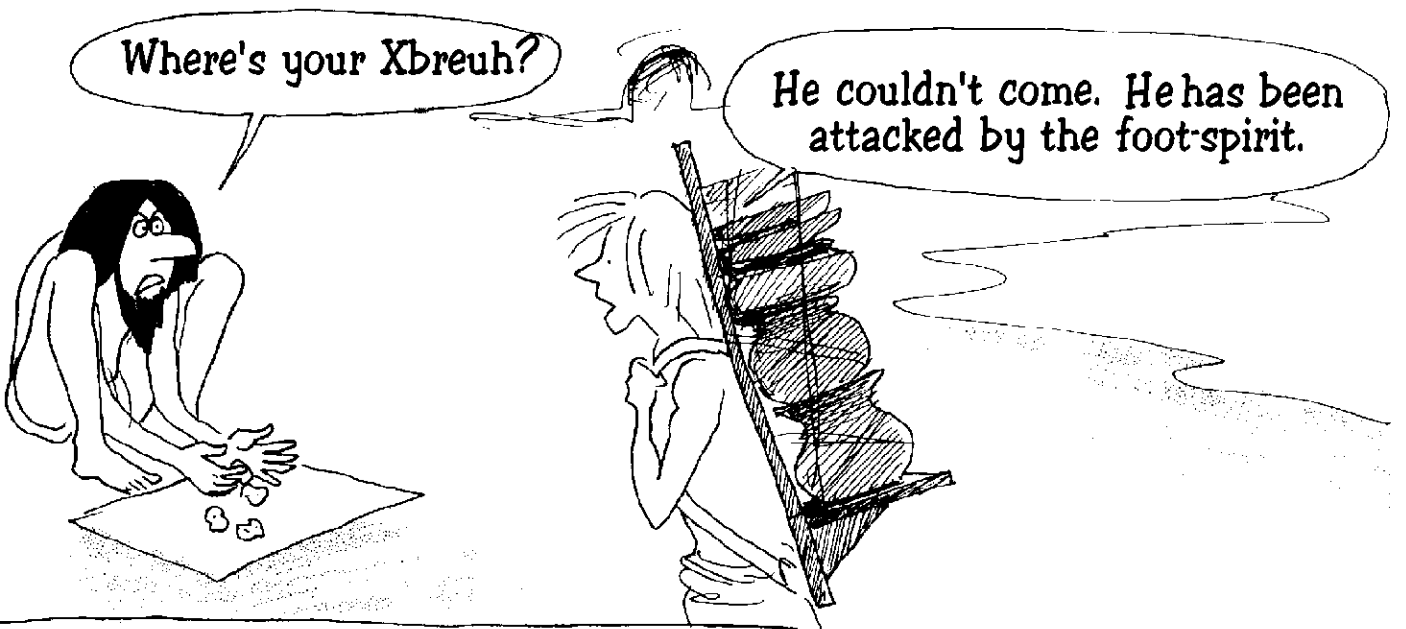
Watch. See, you use your thumb to indicate the joints in this order. When you've finished that makes a dozen. Use tree bark to mark all that.

Off you go, and don't reveal the secret to anybody, if not the god Wal will punish you and you'll be obliged to explain yourself to me!...



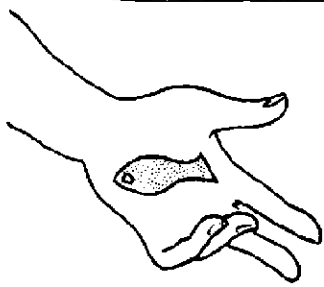
And if you cheat me I'll have you flayed.

# THE BIRTH OF MONEY





I've got something better. See those small iron objects? Each REPRESENTS a fish.



I can see that but what will I tell my master If I take him small objects instead of fish?

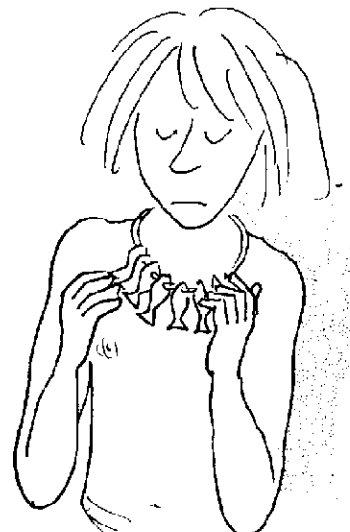
These iron fish are very popular you know. The southern Poloks exchange them for food sometimes. Hunters know how to make arrowheads out of them and it seems that they can make lots of other things if you melt them.



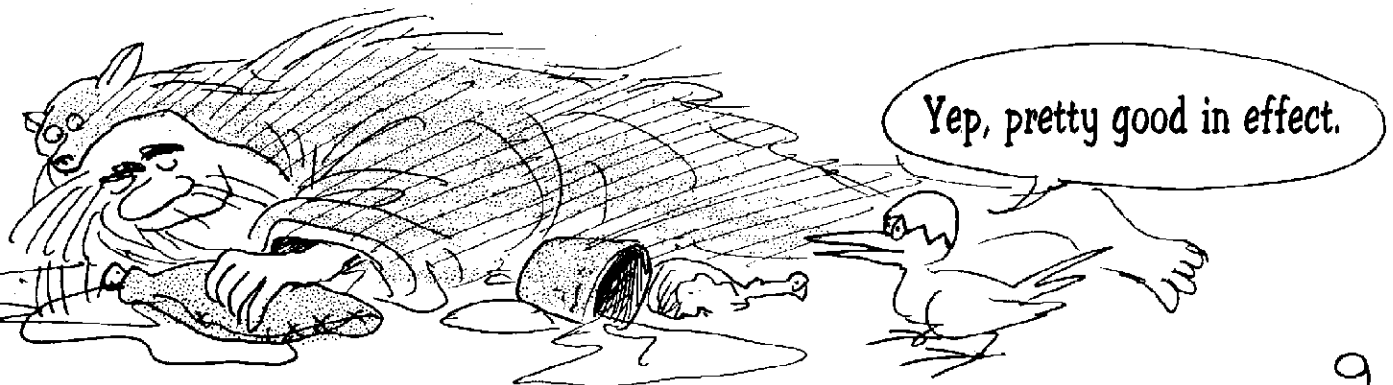
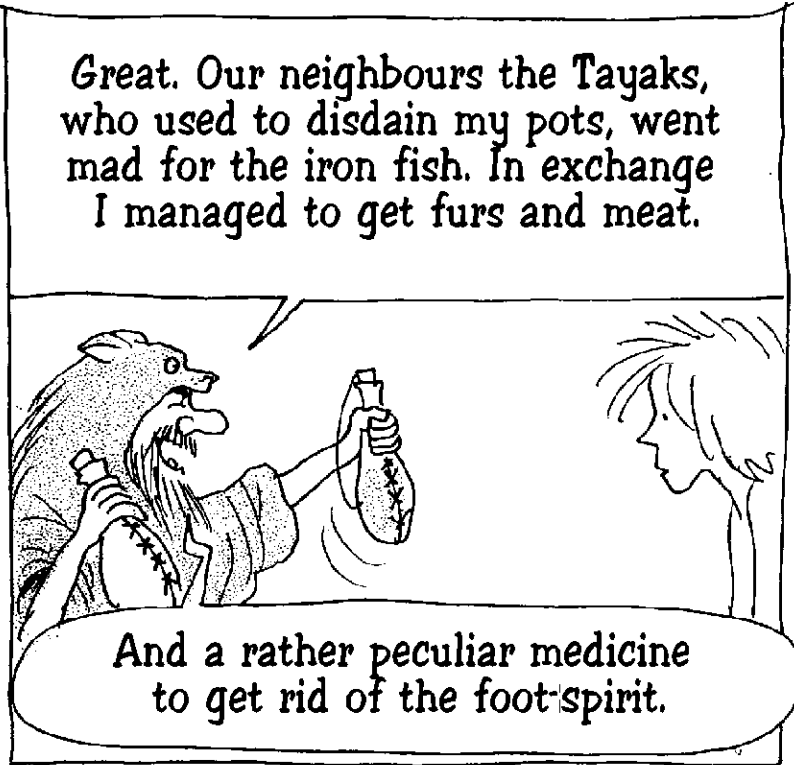
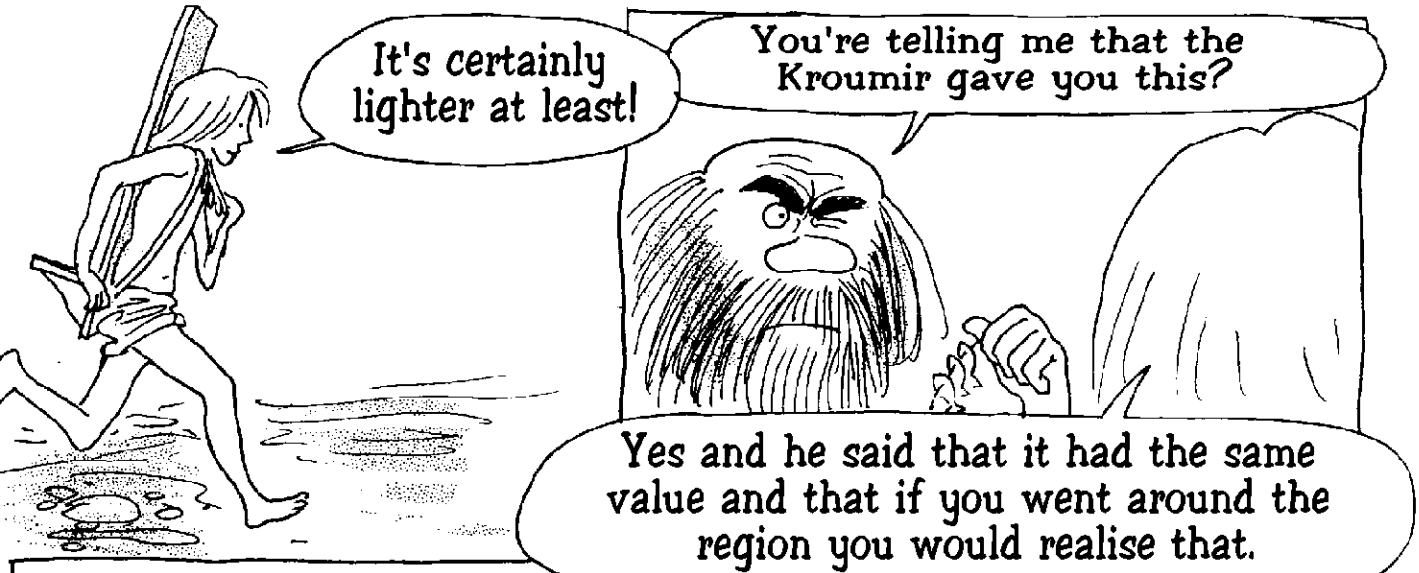
Sorry, but I don't TRUST them. They're pretty small and I'll get beaten.

Well how are you going to do your accounts with your pots? This system will simplify your life, one fish, one object, one fish, one object.

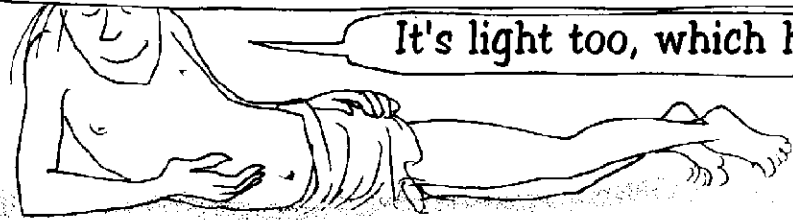
That way you won't make a mistake. As well as that you can make a necklace and then you won't lose any on the way back! (\*)



# COMMERCE



So money allows transactions to be made without needing to directly exchange products that may need to be consumed immediately. The Xbreuh uses pieces of metal to change his pots of meat for alcohol, by accepting to temporarily hold objects that can't be used directly but can be used as a token of exchange, MONEY



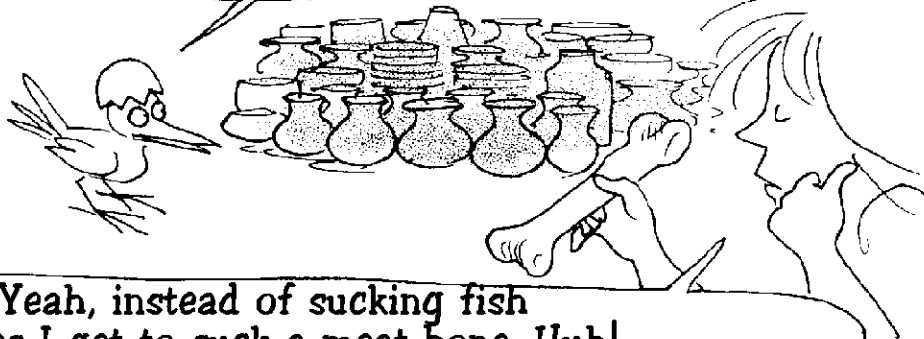
It's light too, which helps

## CONSUMER CIVILISATION

I've come to a decision. You'll have to make more pots, tons of pots, and instead of exchanging them for real fish, you can bring back those little objects instead. I'll buy meat with them, and a lot of medicine.



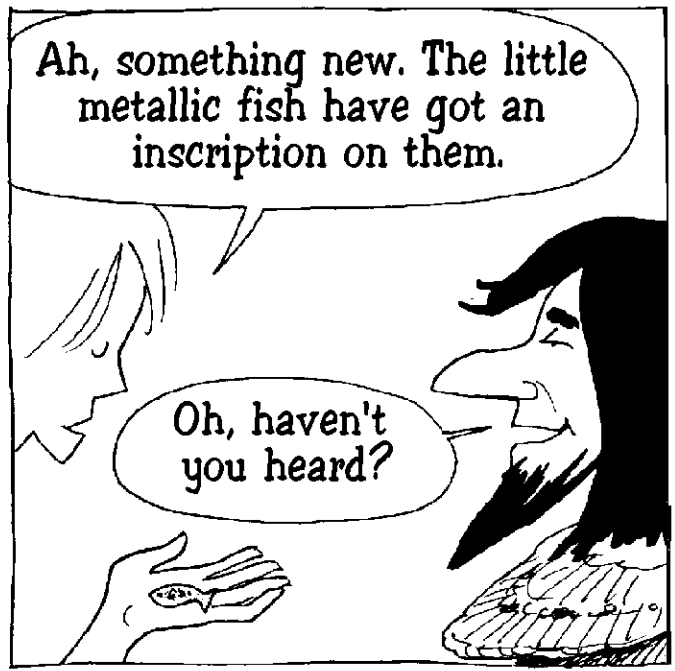
What good is it to you to make three times as many pots? Three times more than you NEED?



Yeah, instead of sucking fish bones I get to suck a meat bone. Huh!



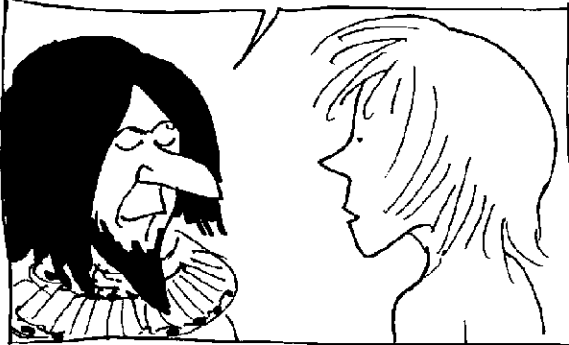
By Wal, these cargos are getting heavier and heavier!



Ah, something new. The little metallic fish have got an inscription on them.

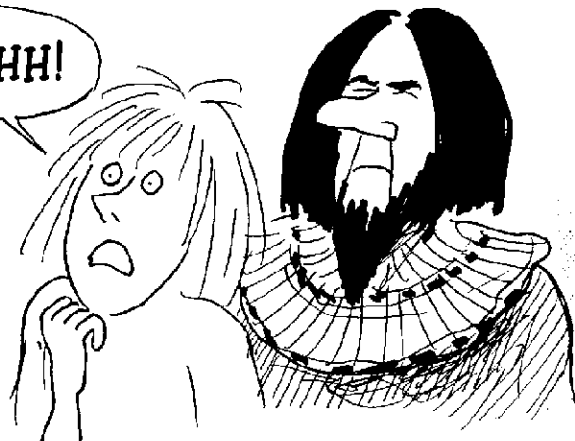
Oh, haven't you heard?

The southern Poloks have been warring with just about anybody. In the end they annoyed King NUMIS who went after them and imposed his domination over the entire country. He found the idea of the little metal fish amusing so he took over the metal mines and the foundries. Now he has the exclusivity in this affair and he's putting his mark, his seal, on each piece.



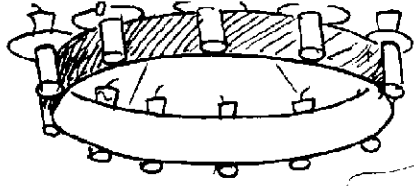
Just a detail:  
Anyone who doesn't  
is impaled!

AAAHHH!



# THE MONEY SUPPLY

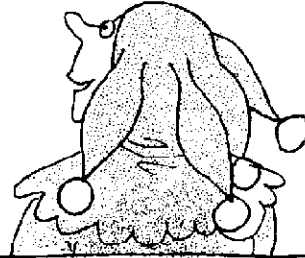
At the court of King Numis:



This invention of the Poloks, this **MONEY**, is a great idea. We can buy the entire world.

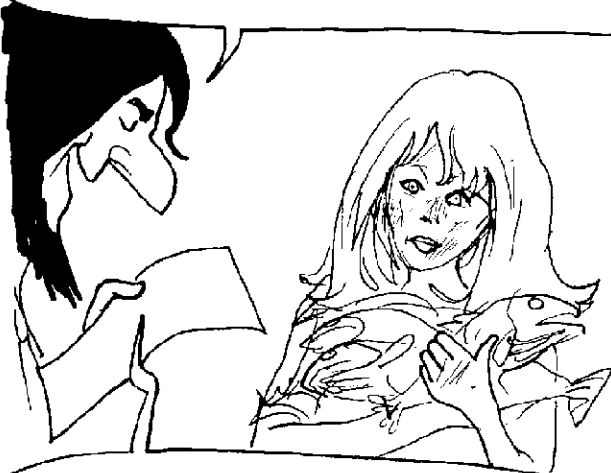


The earth sire?  
Why not the universe?



You're right. Let's buy the universe.

Business is going well Sophia, I have very large orders from King NUMIS. He has decided to invite all the inhabitants of the earth to lunch. He wants incredible quantities of potted fish.



We'll have to intensify fishing, you'll have to weave a gigantic net so that we can trawl the lake!

Ah, lovely money!



As for Archibald, he had to make an incredible number of pots for the Xbreuh of Borderia.

That makes a hand of hands of hands (\*)



You mean those arrowheads. We've got plenty already thanks. Our quivers are all full so we're really not interested.

And anyway, it's iron, just iron...



OK, If you insist. Four hands of arrowheads for a litre

But at the other end of the chain, among the Tayaks...

Two hundred litres of medicine for your foot-spirit! And what next?



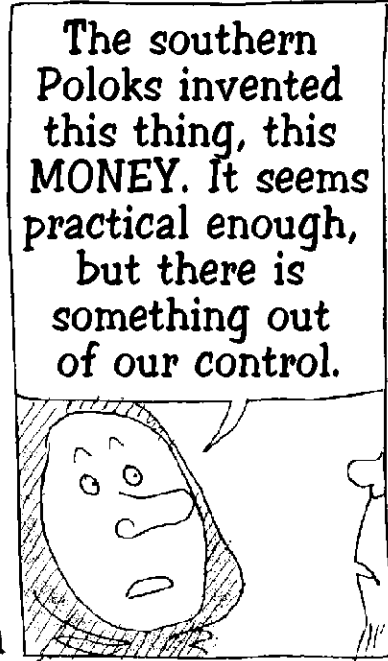
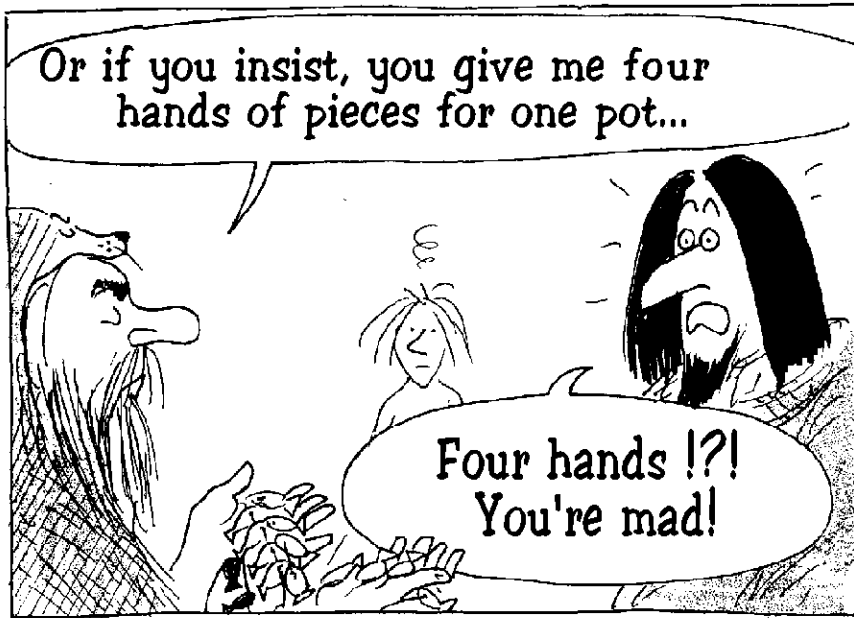
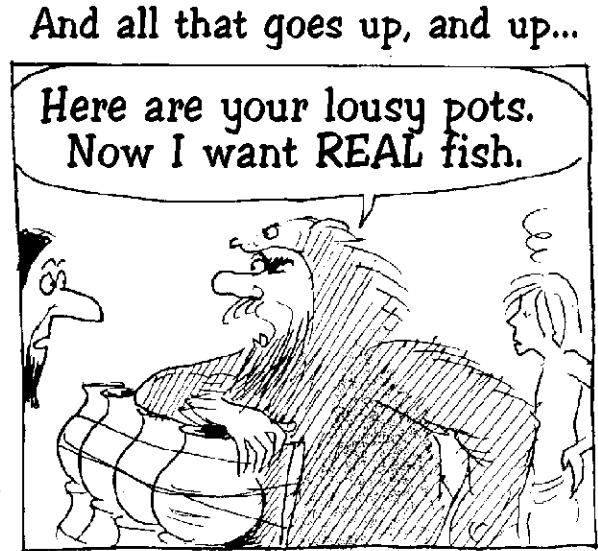
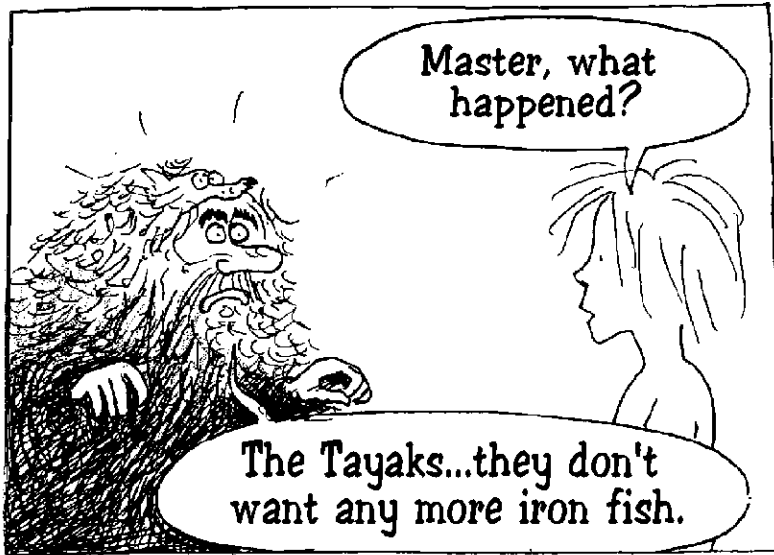
But I can PAY for it, I've got money.

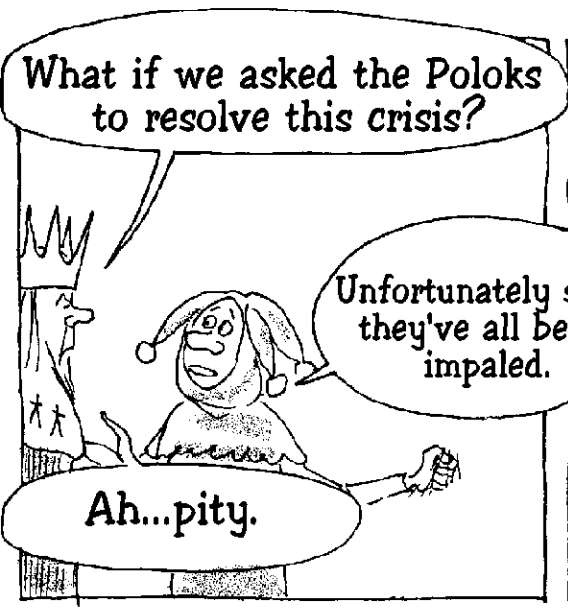
But you can't do that. It was one arrowhead a litre before! I can make you stick to this rate you know.



Oh really? Go and get the resin and chicken feathers lads.

(\*)  $12 \times 12 \times 12 = 1728$   
(A hand contains twelve phalanxes)

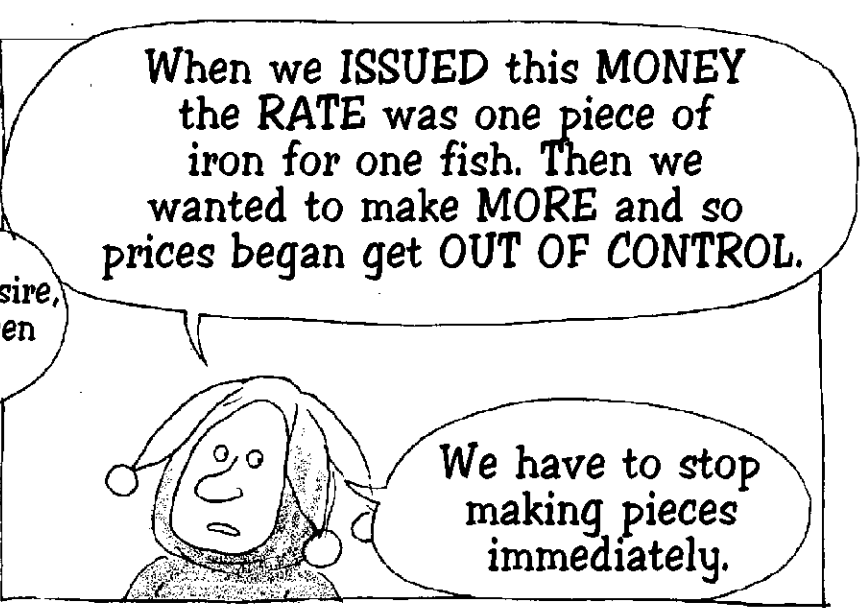




What if we asked the Poloks to resolve this crisis?

Unfortunately sire, they've all been impaled.

Ah...pity.



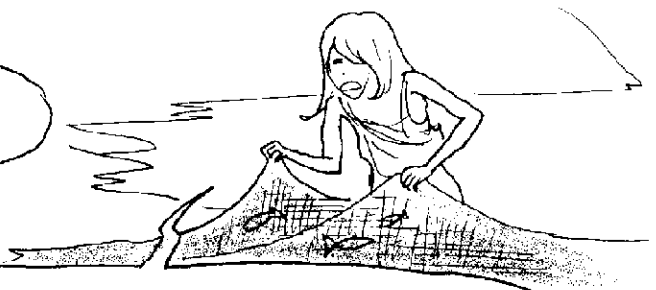
When we ISSUED this MONEY the RATE was one piece of iron for one fish. Then we wanted to make MORE and so prices began get OUT OF CONTROL.

We have to stop making pieces immediately.

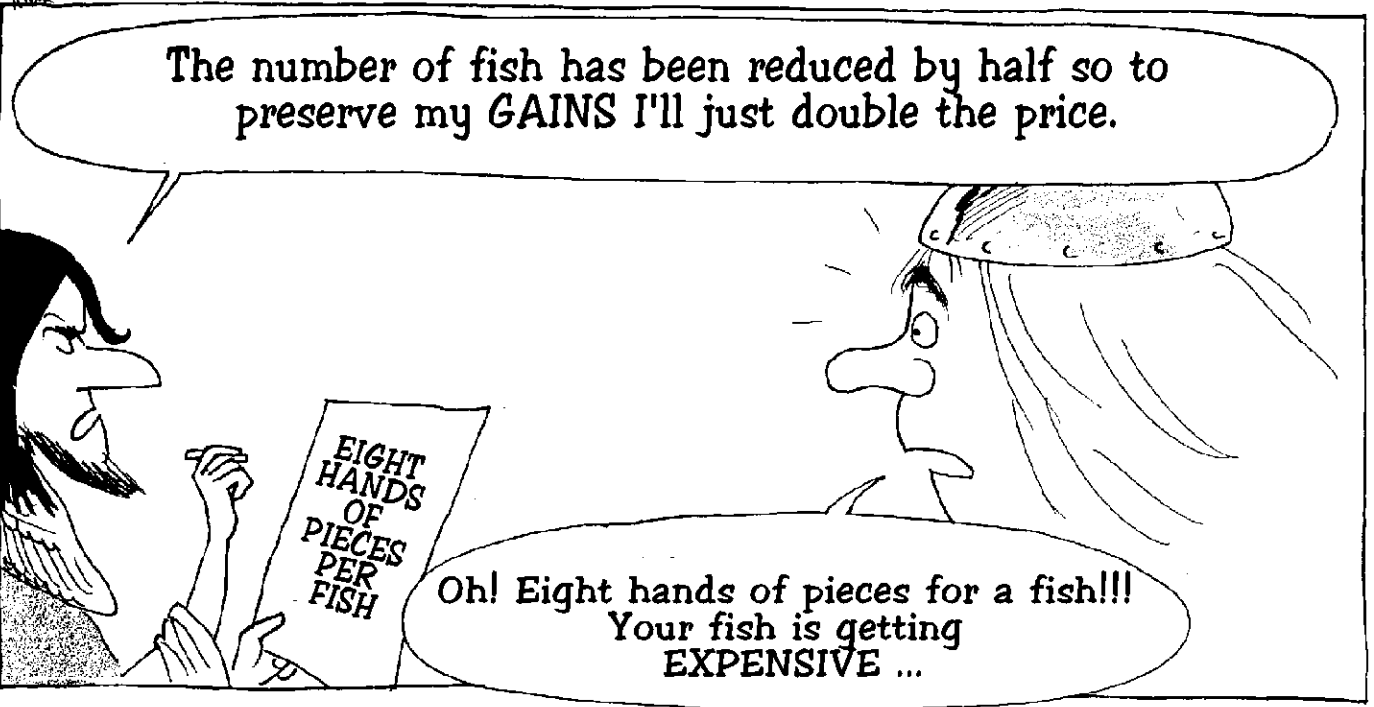
But in Kroumir's land, the prestige operation decided on by King Numis is having other consequences:



Is that all you've brought back dog!?!



It's pointless getting annoyed. With this mad order we've decimated the fish in the lake and ruined the bottom.




The number of fish has been reduced by half so to preserve my GAINS I'll just double the price.

Oh! Eight hands of pieces for a fish!!! Your fish is getting EXPENSIVE ...



# THAT WHICH IS RARE IS EXPENSIVE

Have you seen sire, fish is becoming so scarce that its price is climbing  
**RARETY INCREASES VALUE.**



Perhaps we didn't make a good choice with our money.  
Iron is becoming a common product, they make cart  
wheels out of it. Metallurgy is developing. We would  
be better making money with something that is **RARE**.

What do you suggest?



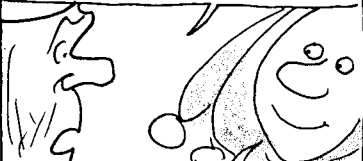
**GOLD**

You're right. **Gold**  
is hard to produce,  
there will never be  
great quantities of it...



And it doesn't corrode

But one thing bothers  
me: this gold can't be  
**USED** for anything, it's  
a pretty soft metal.

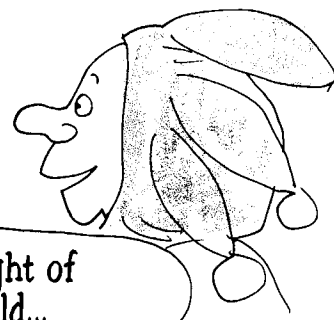


Why should it be able  
to be used for something?

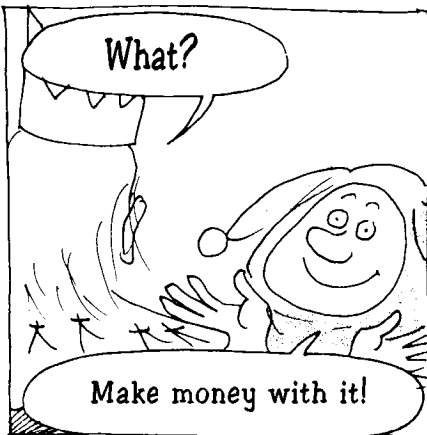
I don't know...iron can be melted.  
You can make lots of **USEFUL** things  
out of it. Arrowheads, nails...



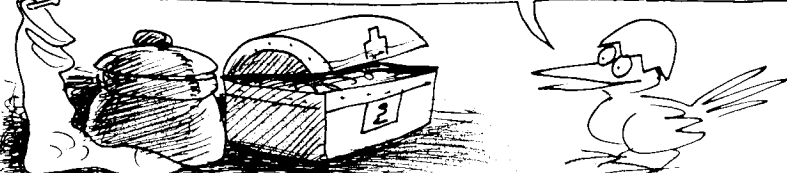
Objects of **CONSUMPTION**



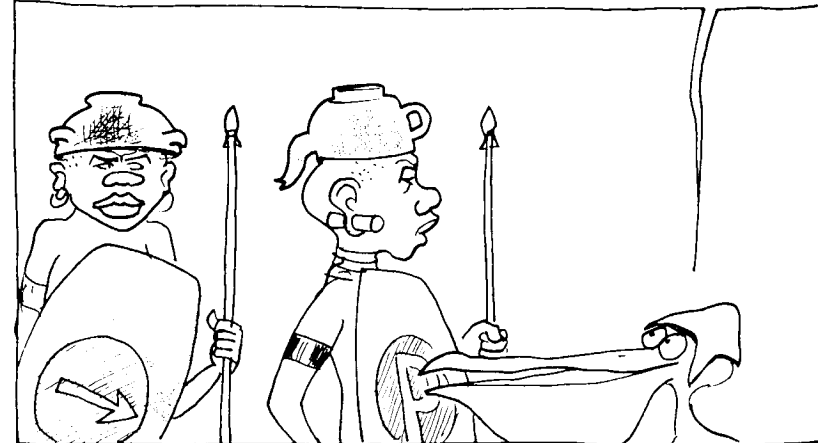
Well I've thought of  
a use for gold...



The country then had a relative period of **MONETARY STABILITY**. The money quickly imposed itself in **EXCHANGES** as an indispensable intermediary. **HOARDED**, stored, it became **SAVINGS**.



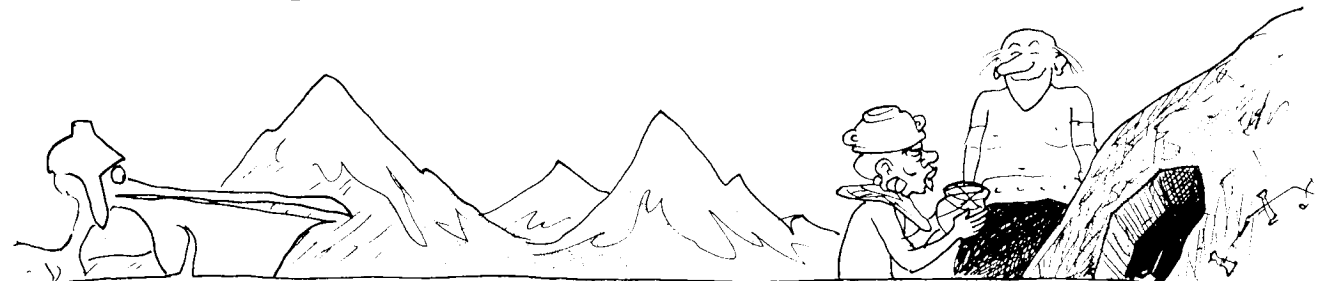
Commerce developed bit by bit. The Xbreuh of Borderia managed to convince the Tayaks to buy his pots, so creating a new **OPENING** for his **PRODUCTION**, a new **MARKET**.



In his turn, the king of the Tayaks was introduced to the pleasure of consumption. and, in exchange for hunted meat, he bought himself lots of fine things



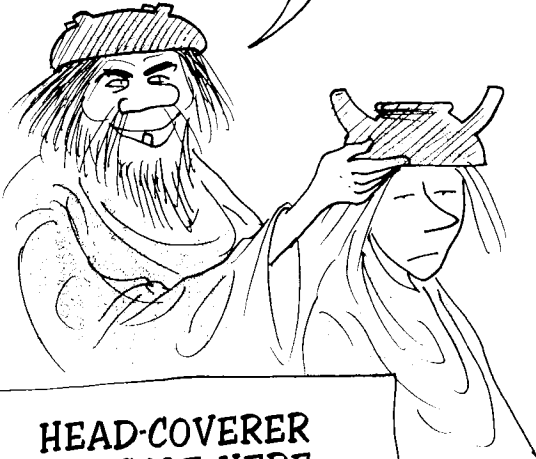
# BANKS



Careful to economise the money of his people and in order to avoid tempting anyone to steal it, he decided to confide it to a neutral neighbour without reproach, who promised to keep it in a safe place in exchange for a small fee.

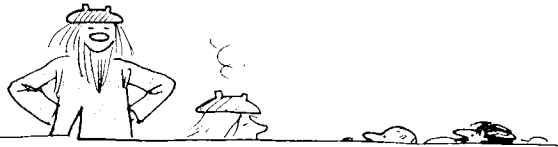
# INFLATION THROUGH SUPPLY

Listen everyone! You who have been walking with bare heads, at the mercy of cosmic aggression, evil spirits, negative waves and the rays of the sun, you need to adopt the original Borderian hat, if you want to be ahead, get a **HEAD-COVERER!**



**HEAD-COVERER  
ON SALE HERE**

Don't waste your time at the schooldesk. Our **GNOSOSOPHIC** hat will bring you all the knowledge you don't have by **TRANSCEREBRAL DIFFUSION.**



Archibald Higgins, here present, who was a complete ignorant, learnt the **SECRET OF THE FINGERS** thanks to our **HEAD-COVERER**

Phew, the Xbreuh certainly knows how to **ADVERTISE!**



What, you don't think that you...

Oh! Are you nuts!?!

Archibald my little one, business is booming!



Fifty gulbars brother!

There are only three left master!

Eh!?! OK. I mean sixty gulbars!

But...you're putting the price up?



Son, its the god Wal who fixes prices and if people ask for more then the price wasn't high enough at the beginning!

We've completely cleared the forest to get wood to cook thes stupid pots.



I've worked it all out Archibald. From now on we'll cook our pots with this black oil, naptha.

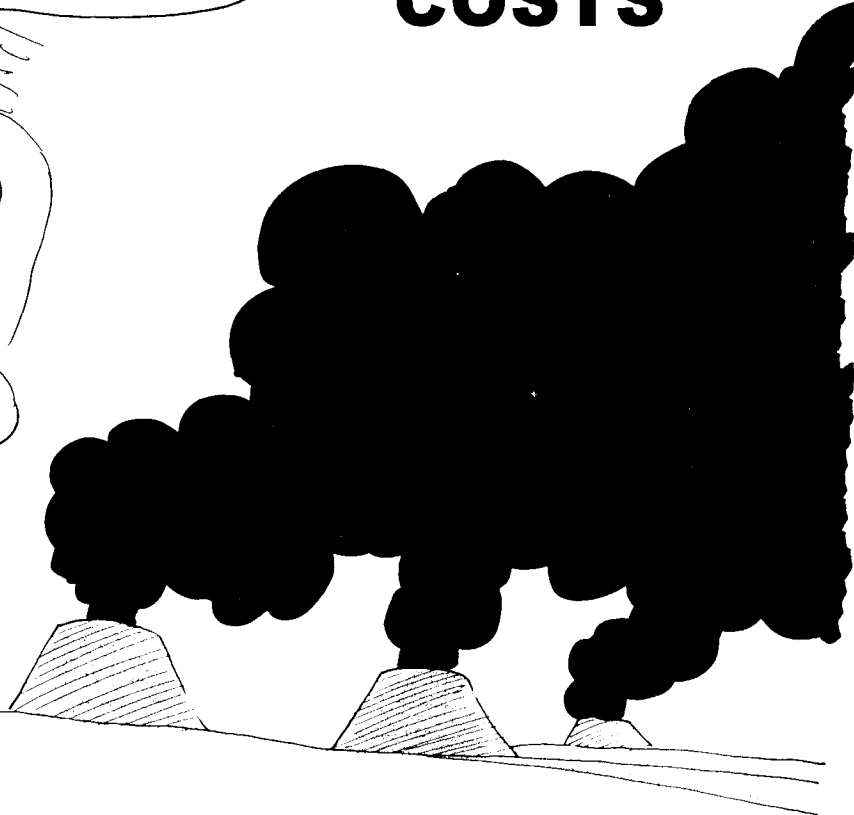
Eurgh! Awful smell!

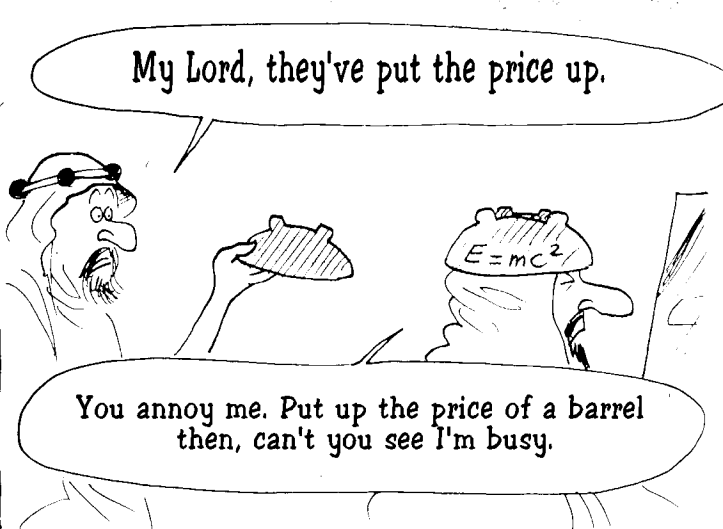
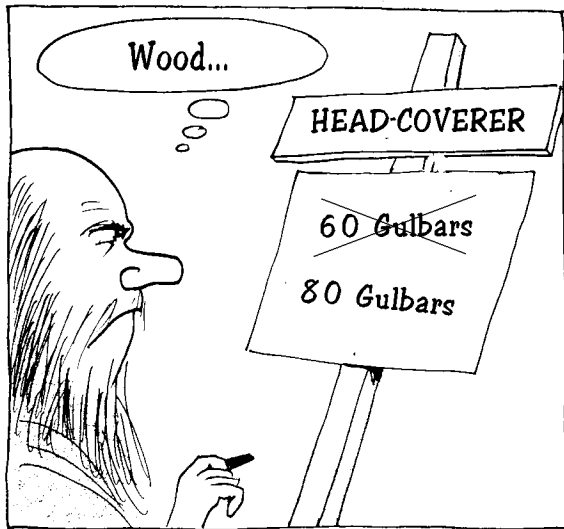
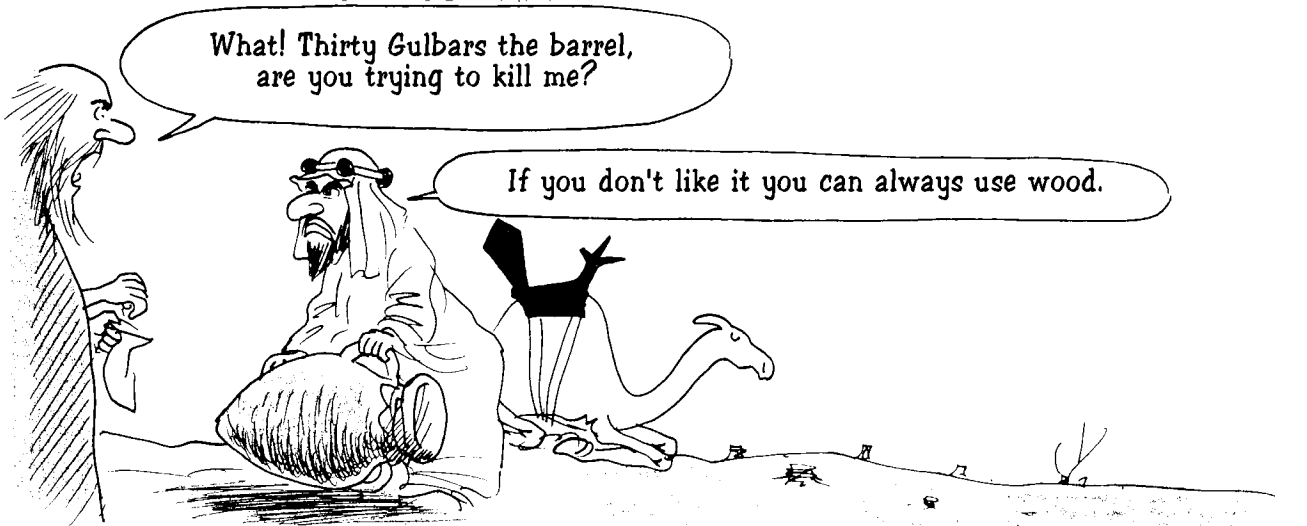


Throw pots, don't worry about anything else.

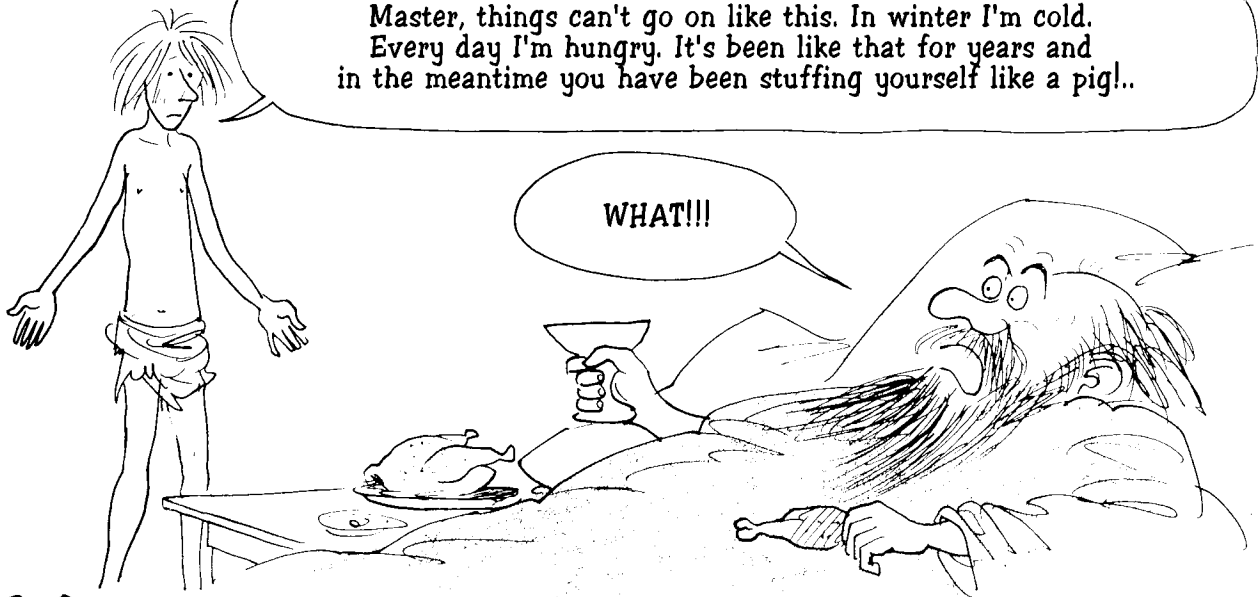


# INFLATION BY COSTS





One day...



Ah, I see. That girl who works at the lake has been putting ideas into your head!..



Apparently over there they've formed a "cooperative" or something like that!



I want five gulbars per day...

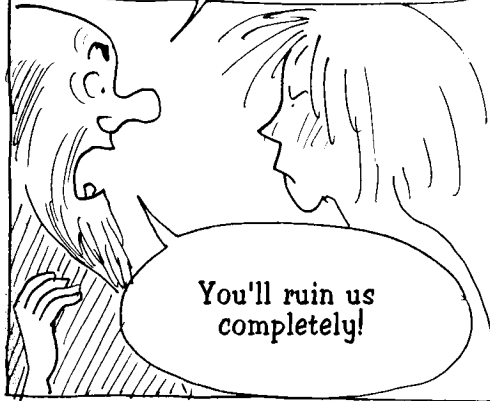
...and one day off each week

Do you want to ruin the business? I've already got the naptha to pay, its price is going up all the time.



All you need to do is drink less...medicine!

Five gulbars a day!  
You're trying to murder me!



You'll ruin us completely!

Five gulbars per day



By Wal, it's a bad dream.

Listen, if you work hard, I'll be good later.

But what will you do with so much money?



No, five gulbars right now!



I'll buy a shirt, and some soap.



Ah, so that's it. First luxury then debauchery, fornication!

You really get on my nerves, all I want is a shirt!

I'm responsible for you before Wal

I'll have to protect you from yourself!

OK. If that's the way it is, you can make your own pots!

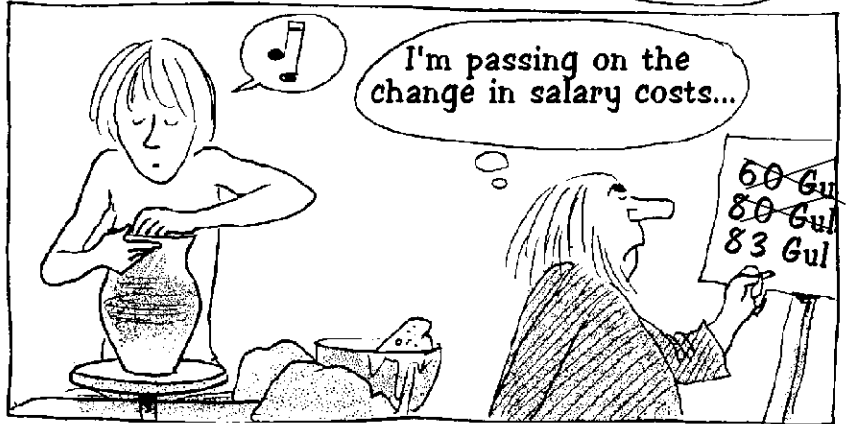
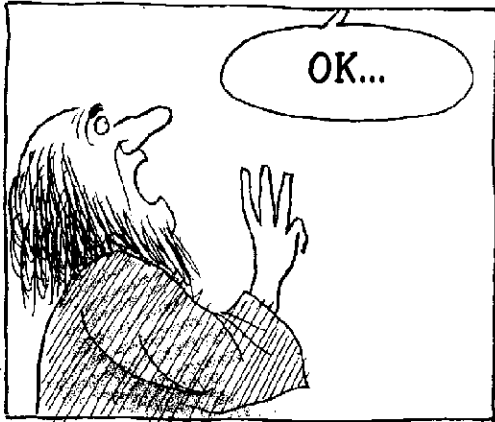
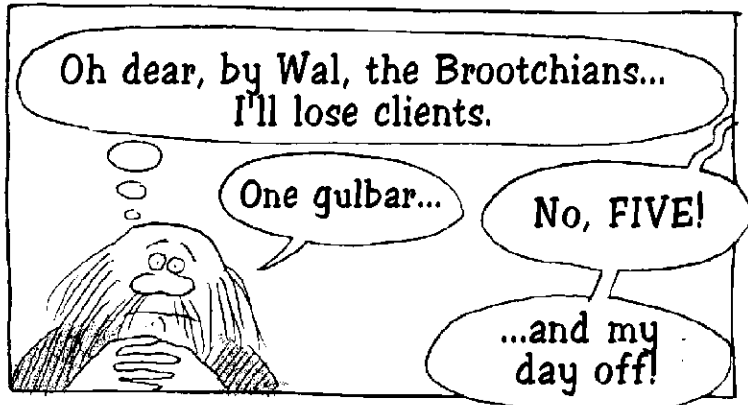
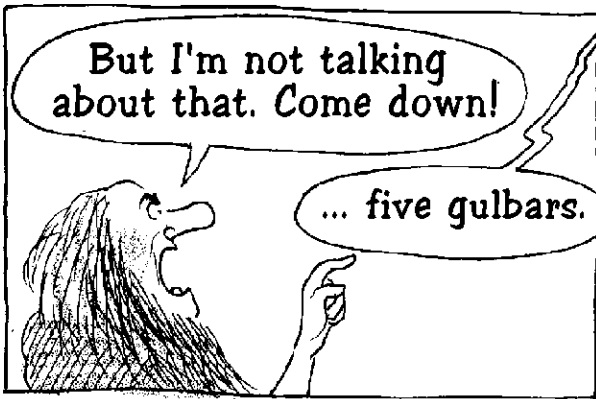
What ingratitude. He owes me everything, I fed him....

Ah, my medicine!

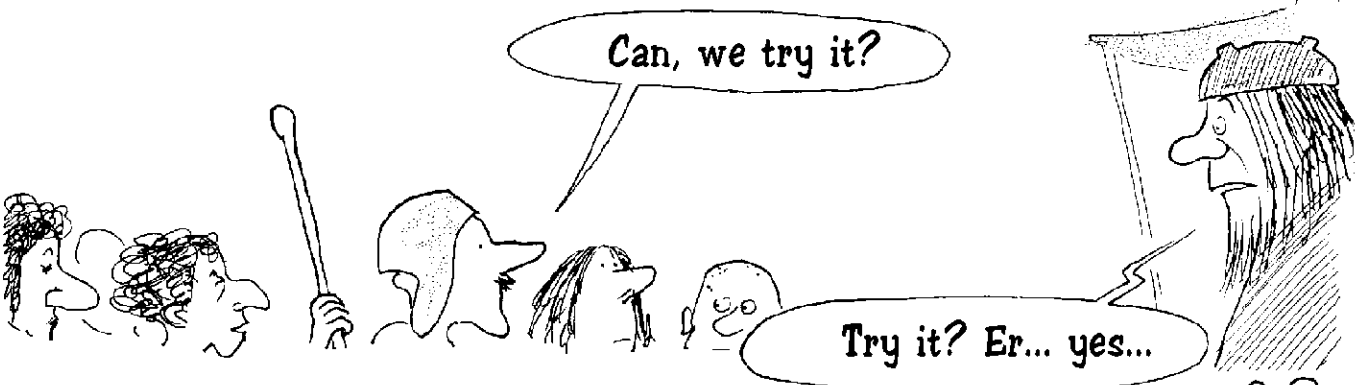
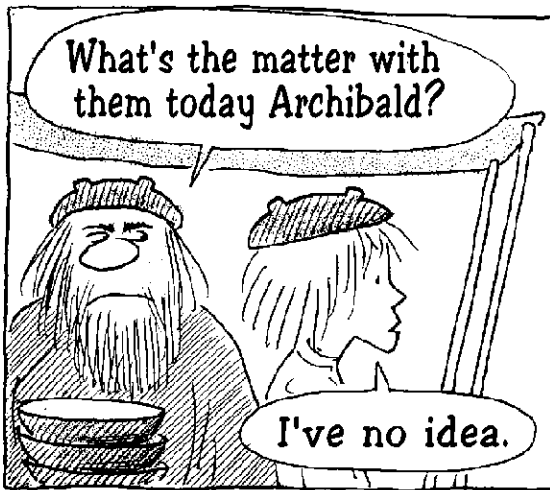
At dawn:

Archibald, come down quickly. You need to make some head-coverers for the Broothchians, they're coming tomorrow...

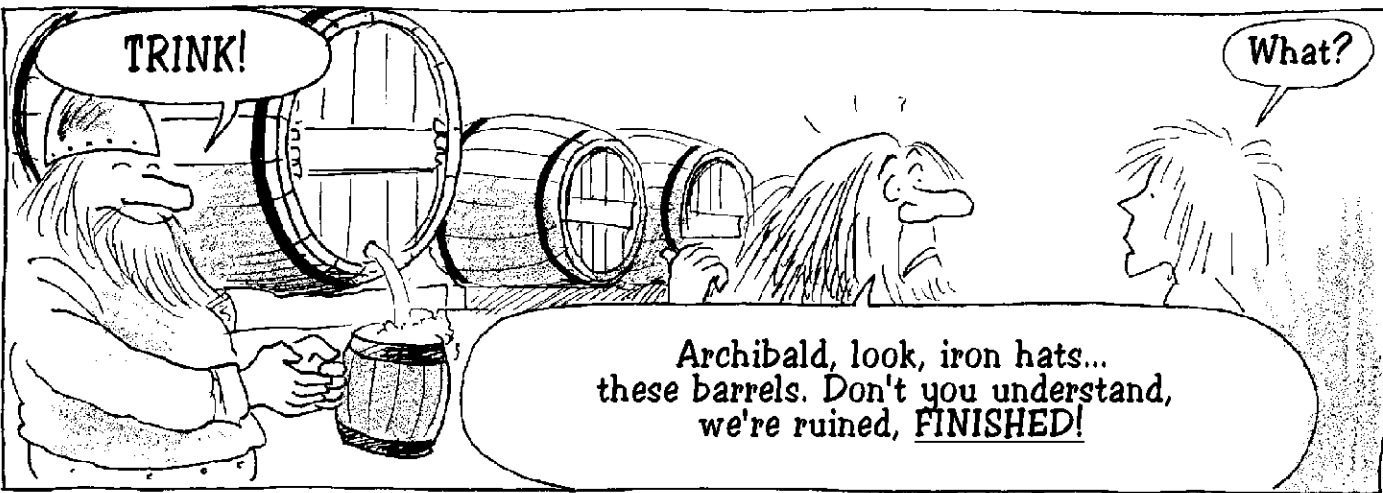
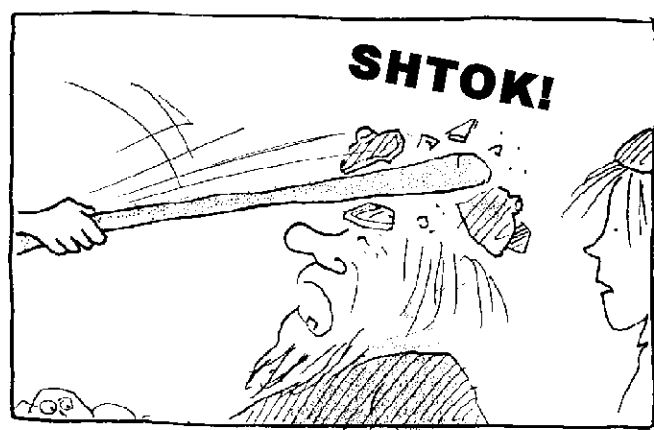
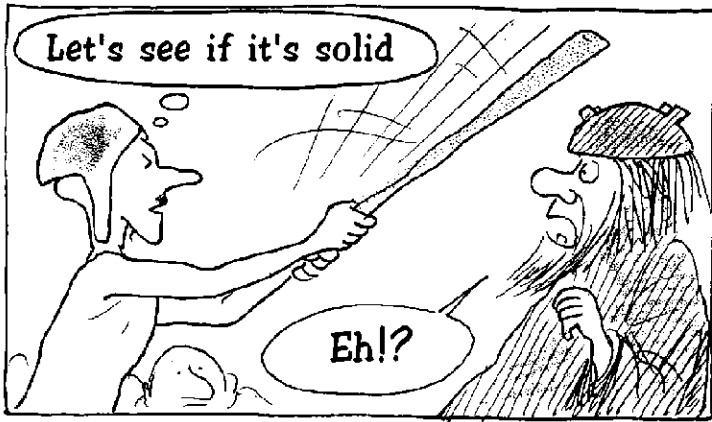
I want five gulbars per day and one day off a week!



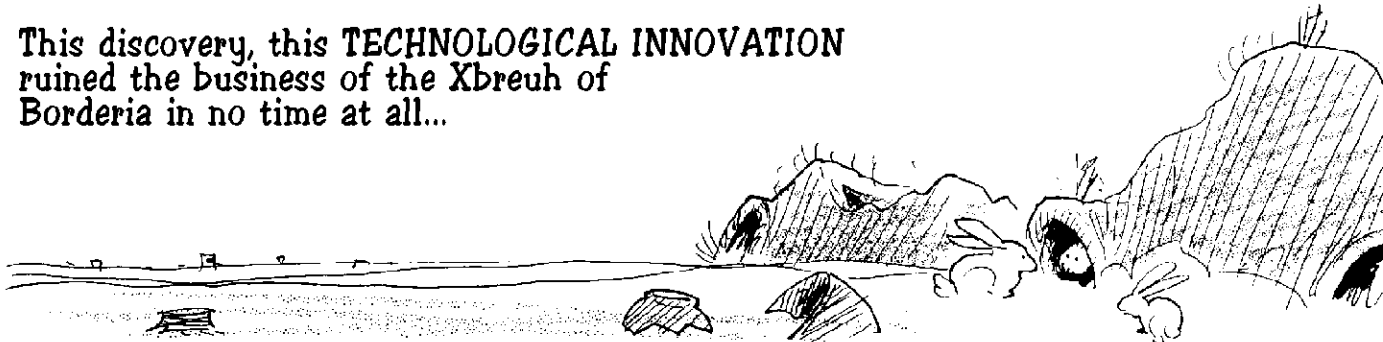
# COMPETITION







This discovery, this **TECHNOLOGICAL INNOVATION** ruined the business of the Xbreuh of Borderia in no time at all...



# THE EMPLOYMENT MARKET

What's that? You're a potter. Not interested. Can you count?

That's numbering in base twelve. We count in decimals now old fellow!..

With all these modern techniques we can't keep up.

Archibald found himself on the arid road of UNEMPLOYMENT, while Sophia, on the banks of the lake..

MATKOBOWSKA. Since we killed the Kroumir and took possession of the lake, what has happened?

Us fishers have contined to do all the work and in the meantime we've seen a whole band of parasites turn up, so we're really no better off.

It's wonderful our Kooperative!

Comrade : You shouldn't say that. The **KOLLECTIVE** is a combat. Here you are fighting on the production front, but others are fighting in the fields of **POLITICAL CONSCIOUSNESS** and on the **PLAN**. We live in a **PLANNED ECONOMY** (\*)

Yeah right! Just come and have a look at your heros of political consciousness!

Look at them stuff themselves and sleep!

They're not stuffing themselves, they're tasting. It's quality control. You've got a warped mind!

We live better here, **Kollectively**. There is no unemployment, work for everyone.

Quality control my eye!

There are no longer any rich people.

For **ONE** who is really working there are **TEN** doing nothing or sleeping.

Be careful Sophia, he's from Security. He's dangerous.

I know all that by heart. Heaven knows I wanted this revolution and when we killed the Kroumir I didn't shed a tear for him. But what are you doing to ensure that a new caste of incapable, lazy people and cretins isn't being formed, but with a "high political consciousness"...and why do they get the fish tails and we get the heads? Why are there all these PRIVILEGES?

Your retrograde mentality is blinding you. You have to look at the big picture and not dwell on each little case.

Over there beyond the hills in Borderia it's EXPLOITATION OF MAN BY MAN.

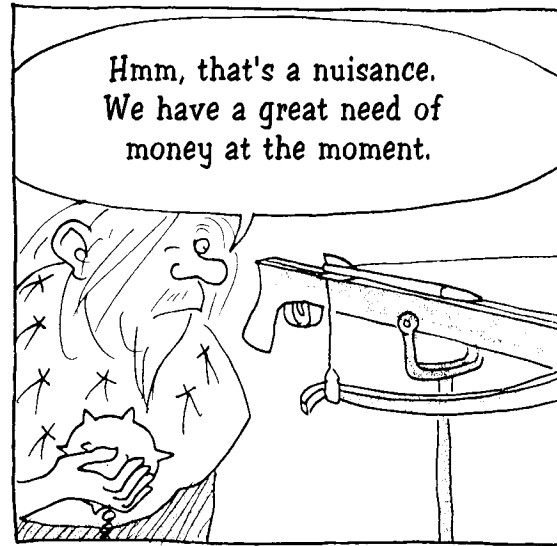
Here it's the other way round!



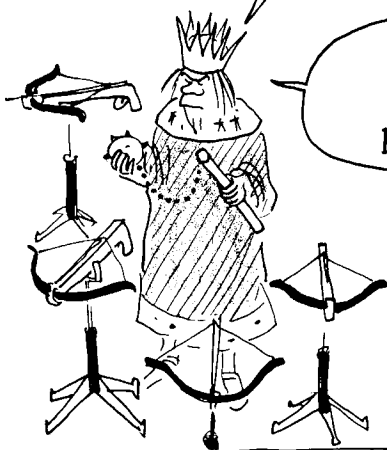
That's enough! I'm going to write a report on you!..

to the FATHER of THE PEOPLE

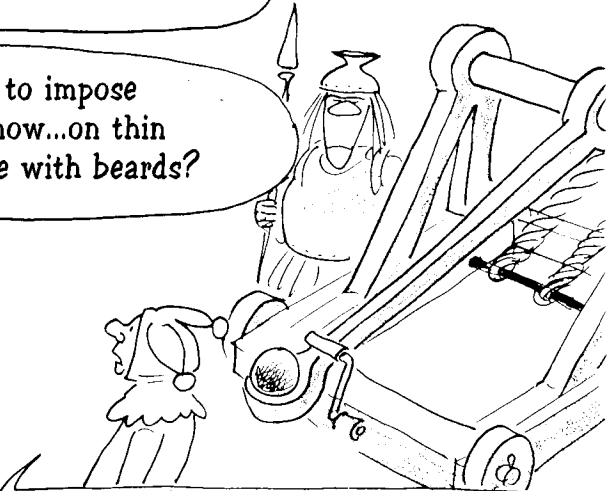




I wouldn't like the same thing to happen here as happened in the province of Eastern Kroumir.



Well we'll just have to impose another tax. I don't know...on thin people perhaps...or those with beards?

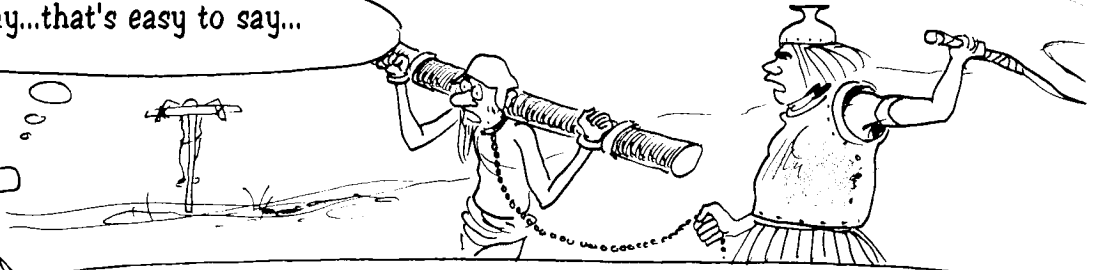


Sire, that is no longer possible, it will have a disastrous effect. And we can't make the gold pieces any thinner or we be able to see through them.

Listen, you're my economist. It's up to you to invent a solution that will let me take what they've got without them noticing. So find a way otherwise you'll be impaled!



Find a way...that's easy to say...



Ah, a condemned man being taken for punishment. They're being very hard with him, it must have been a serious crime!

Tell me decarion, what did this man do?

Wrote a cheque with insufficient funds

Some people put their gold in a safe place in the caves in the mountains but the problem is this gold doesn't circulate anymore.

Yes, it slows down exchange.

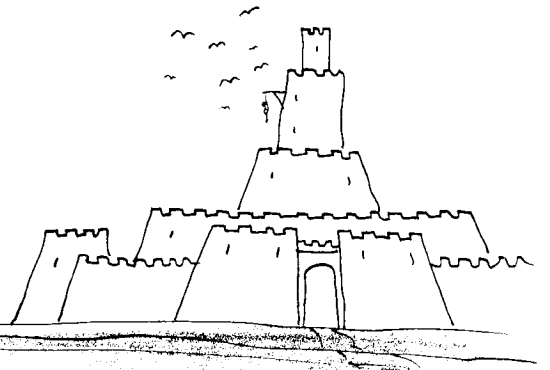
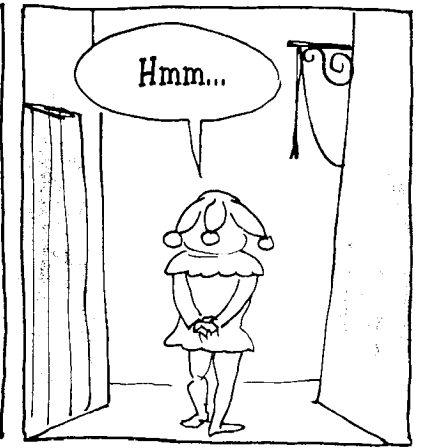
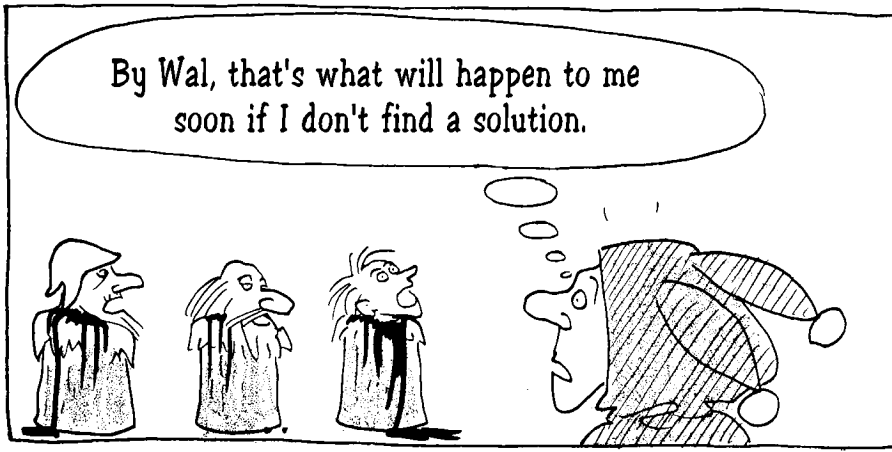
So some people invented a system. They put on a piece of parchment "pay the bearer so many gulbars" and they sign it. They call them **CHEQUES**. You can pay for things with them. Of course it is forbidden by law to write more cheques than you have gulbars in your cave, your **BANK**.

If they want people can take them into the mountains and exchange them for gold-gulbats.

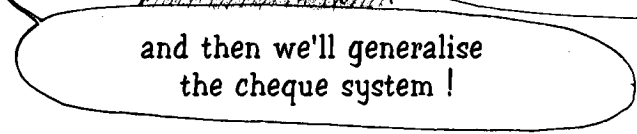
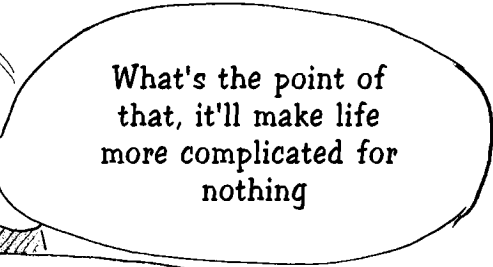
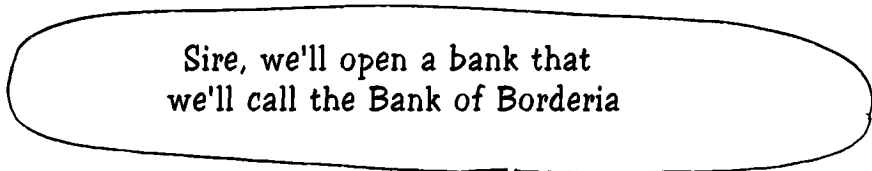


**AAAAAHHHH**

Thankyou very much decarion, you can stand at ease and rest, you must have made quite an effort to explain all that to me.



# PAPER MONEY



We start by bringing to our bank all the gold held by our subjects. "Encouraging" them of necessary. In exchange we'll give them papers saying "voucher worth so many gulbars" and we'll make it that in the end that is all that there is in circulation.

But...we still won't be any richer!?

Ah, wait a minute, I think I'm beginning to get you

We'll also put "papergulbars" into circulation and, obviously, they'll be a lot more of them than "gold-gulbars"

Well...it was becoming clear that our gold-gulbars were getting lighter, but who will know we are issuing this PAPER-MONEY?

This is going to be the biggest affair of cheques with non-sufficient funds in history

Money for monkeys!

..Whoops!..What a gaffe!

What?

Oh, nothing sire...



Yes but wait...if we issue lots of paper-gulbars people will start to become suspicious, even if they are stupid. And if there are more paper-gulbars, far more than gold-gulbars, it wouldn't be possible to change them all at the same time, one for one, PARITY.

Mark you, I could always refuse to change them.

That might cause panic sire,  
people would lose all trust  
in PAPER-MONEY.

If we issue twice as many paper-gulbars than there are gold-gulbars, all we need to do is change them two for one.

I don't think that would go down very well sire.

I know what we should do. When people have given us all their gold-gulbars, we'll melt them down!

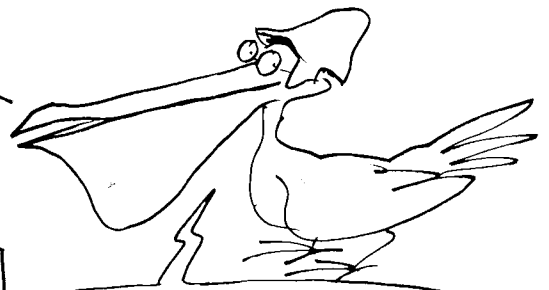
Yes, and what will that give us?

Gold, simply GOLD.

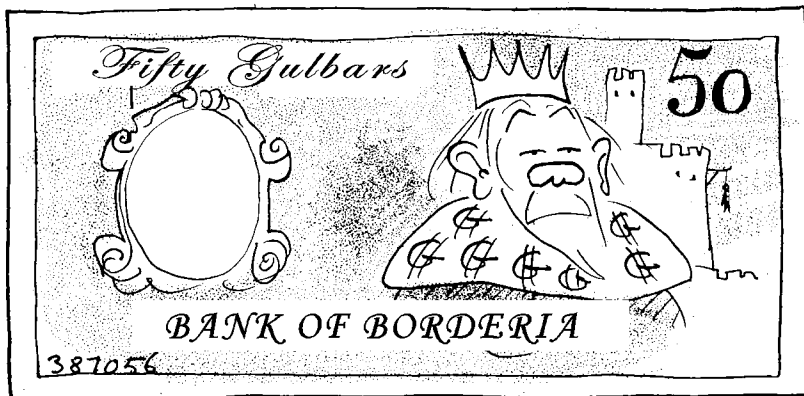
Thus began the biggest affair of dud cheques in the history of the kingdom. Everything went as planned. People brought their gold gulbars, which were immediately melted down and about which nothing more was heard. King Numis had loads of notes printed which people used to buy all sorts of things from here and from there. Obviously prices rose, the gold price too, but as everything was more expensive people no longer remembered the old Borederian money.



This activity, which would have sent any ordinary Borederian to the gallows was rebaptised **ECONOMY**.



Of course Numis had anyone who tried to start their own **ECONOMY** flayed alive.



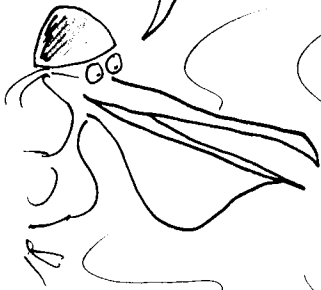
Before, heavy taxes had to be imposed to get money out of people



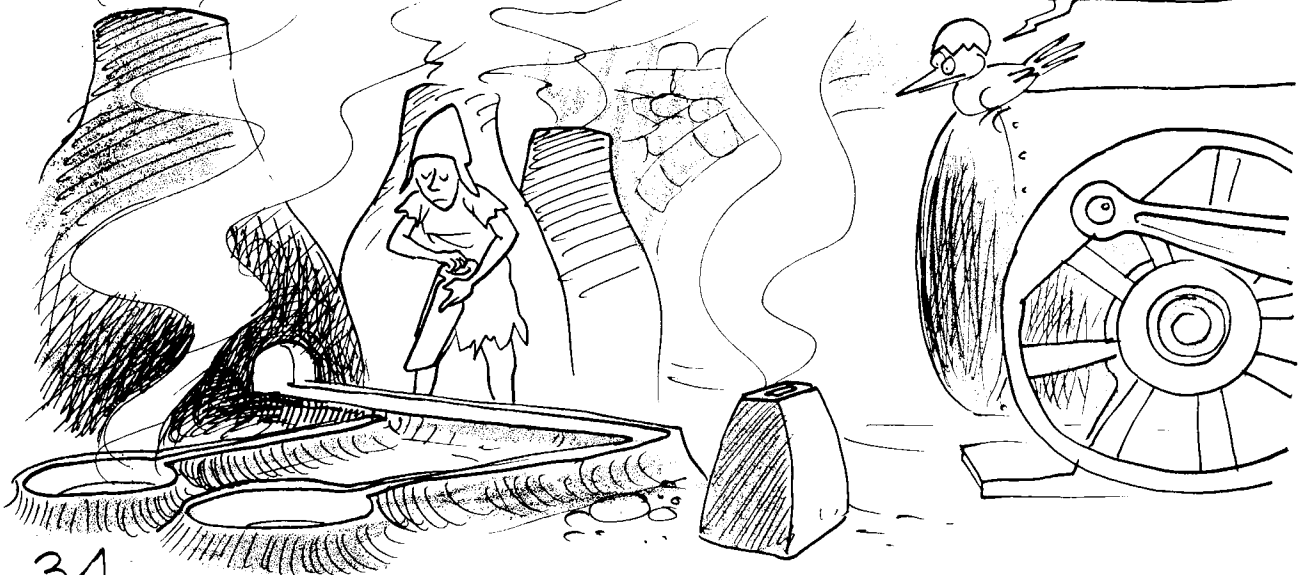
an ugly  
inelegant  
method



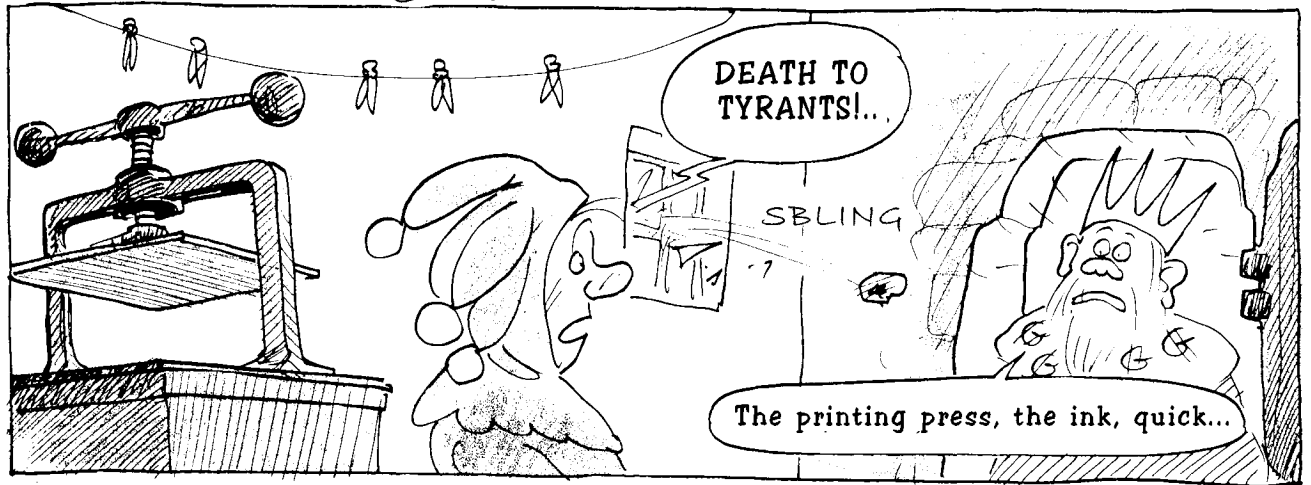
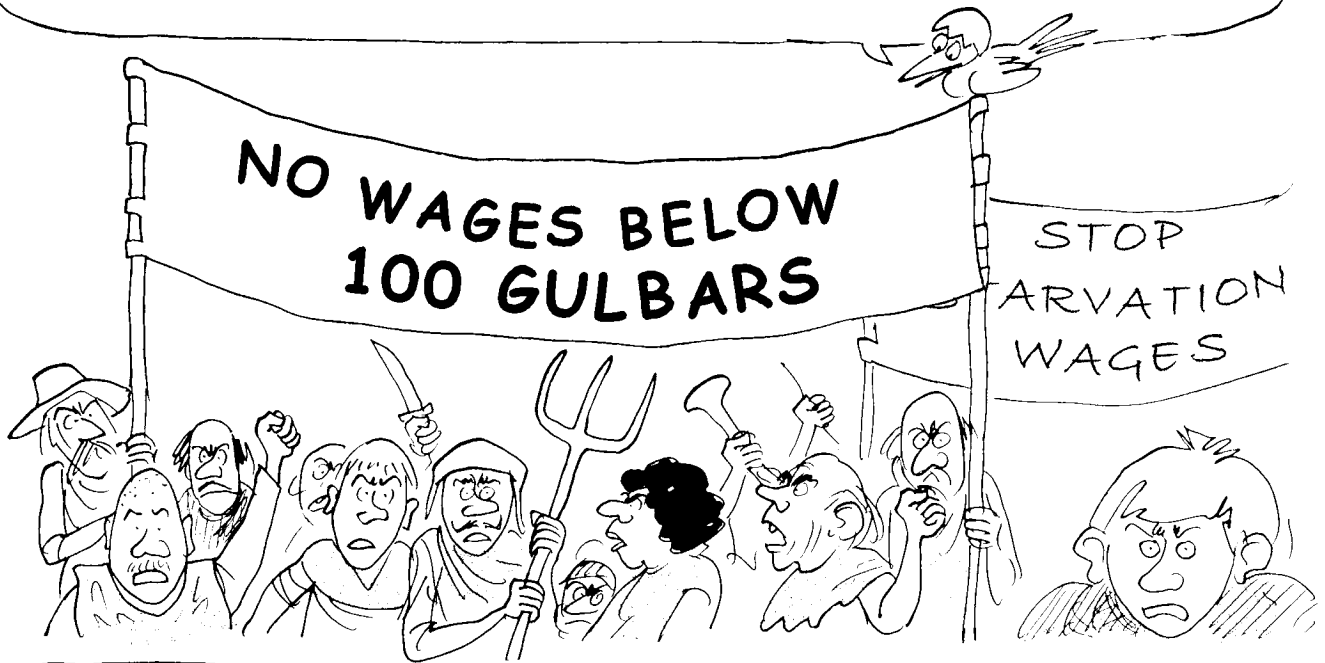
Numis retained the tax system but thanks to the possibility of increasing the **MONEY SUPPLY**, the **INFLATION** he was master of, he never ran out of paper money. OF course, at the same time prices rose and rose...



Nevertheless economic activity in Borderia, which had entered the **INDUSTRIAL ERA**, took off. Factories were built all over the place where Boredrians now worked for salaries. Most of them were owned by Numis and his family, bought or built with...papermoney.



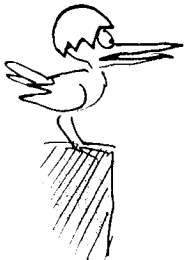
As prices rose, workers felt the need to ask for wage increases and sometimes there were violent protests.



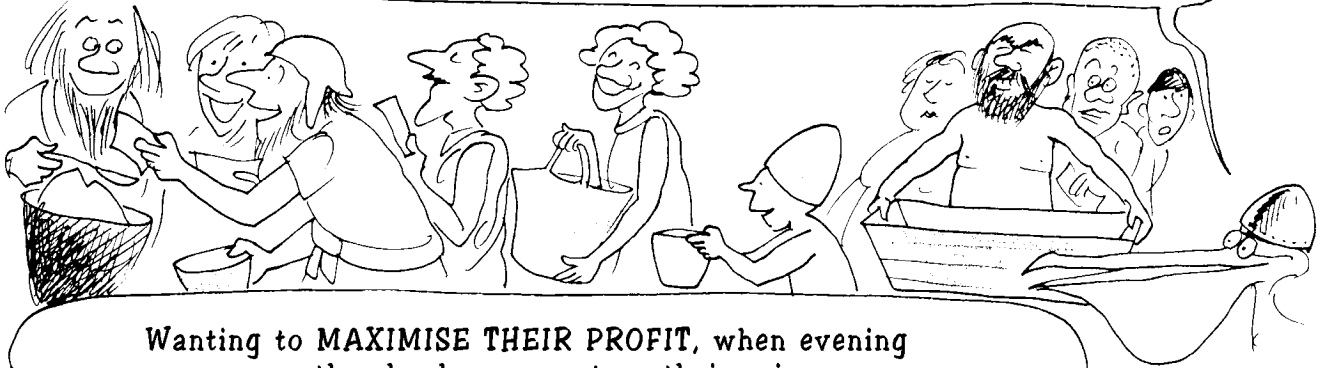
For a while this gave people the impression that they were richer.

Ah, we've got a few of his gulbars out of him at last

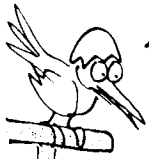
Victory, victory!  
We won!



People headed straight for the shops to buy things



Wanting to **MAXIMISE THEIR PROFIT**, when evening came the shopkeepers put up their prices.



~~800 G~~  
900 G

If they're coming back for more it's not expensive enough, Wal's Law that is!

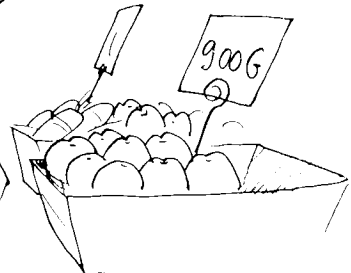
And don't forget to pass on the wage increase we've had to give the porter.

The more it changes, the more it stays the same.

I don't get it.

Two hundred gulbars. Ten years ago I was earning five!

Have you seen these prices?



What times we live in!

I wonder where  
all this is going  
to take us.

Madam Sophia

All types  
of potions

?

Sophia!

Archibald!

Whatever are you up to here?

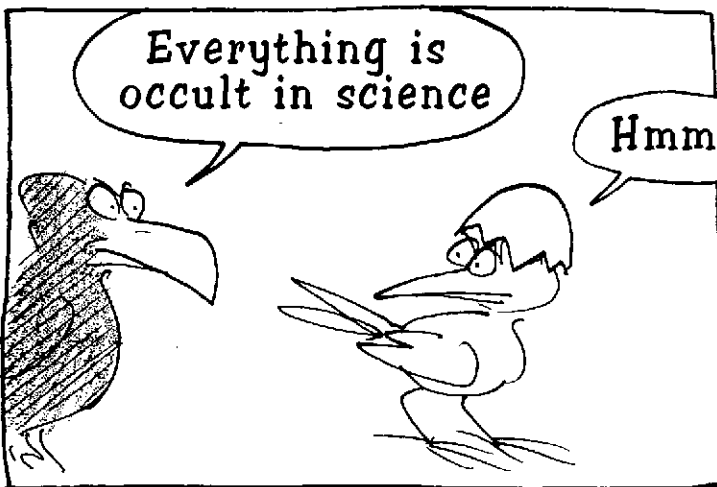
Can't you see, I've  
recycled myself

I did a course in  
parallel science

what have you got  
against parapsychology?

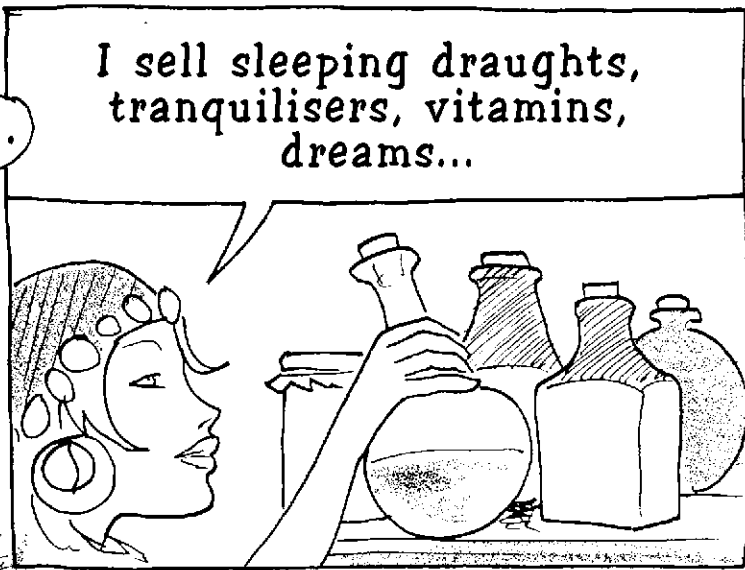
You mean...  
sorcery?

Ah, straight away the big words!



Everything is occult in science

Hmm...



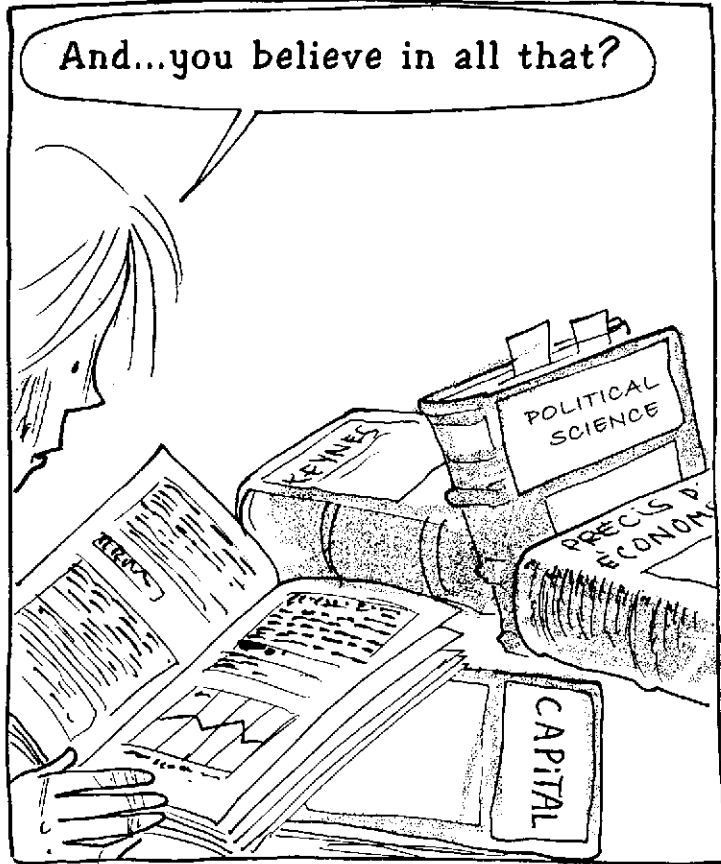
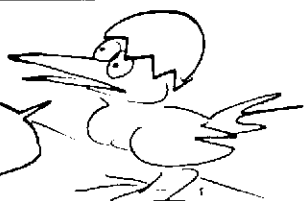
I sell sleeping draughts, tranquilisers, vitamins, dreams...



And it works?

I'm not complaining... during the famine I had a turnover of six hundred thousand gulbars

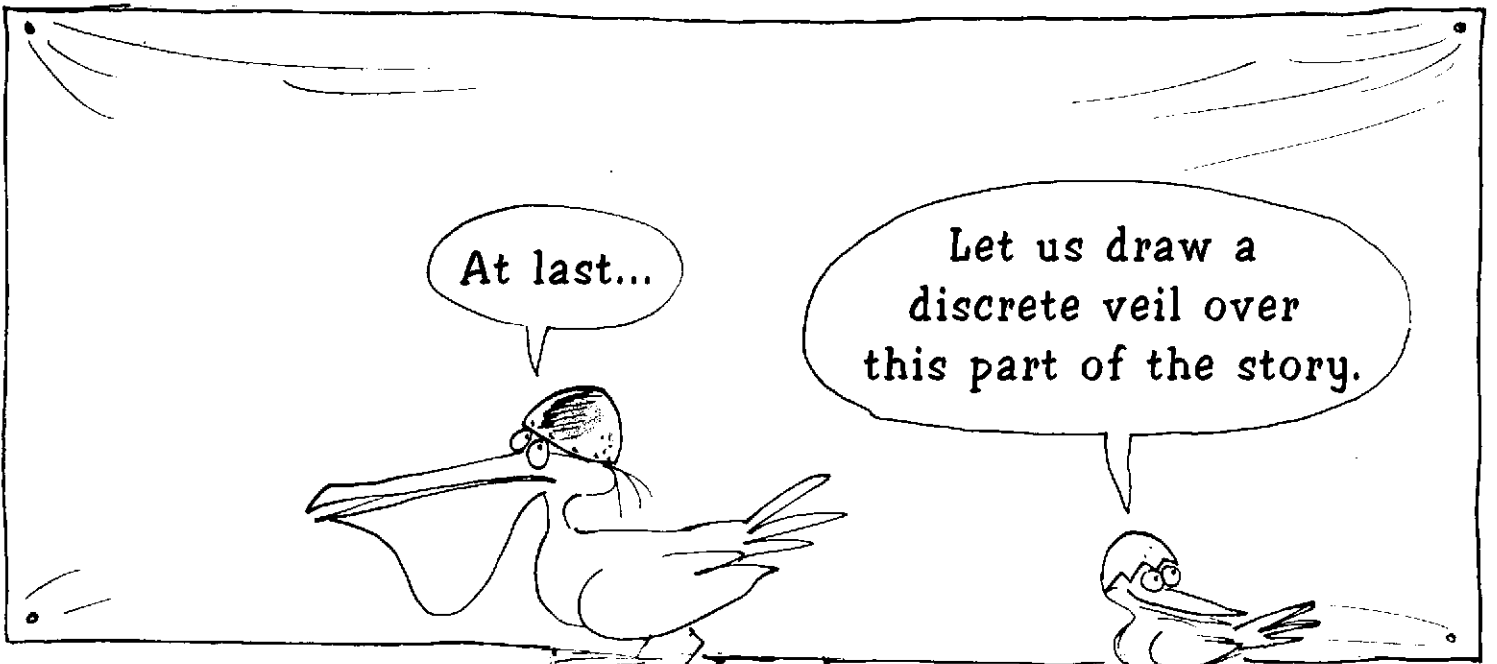
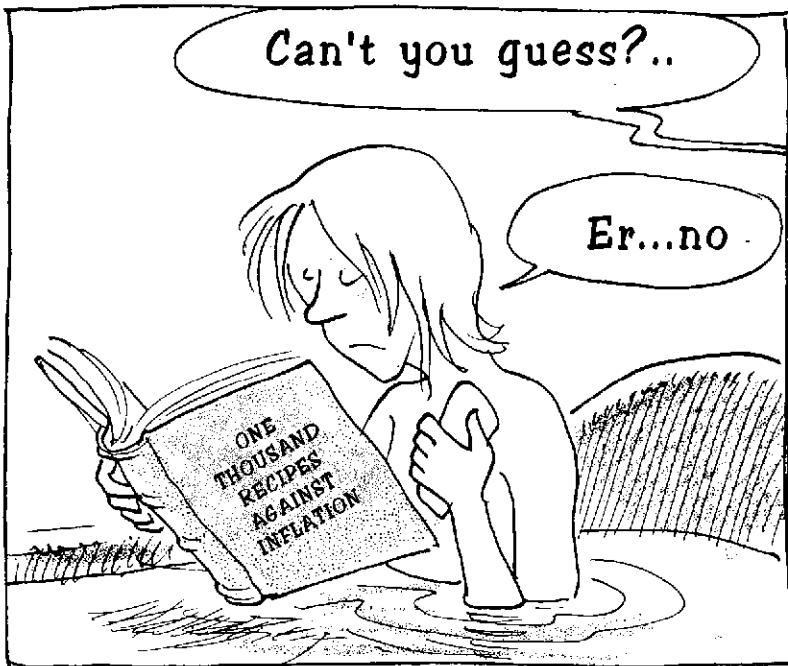
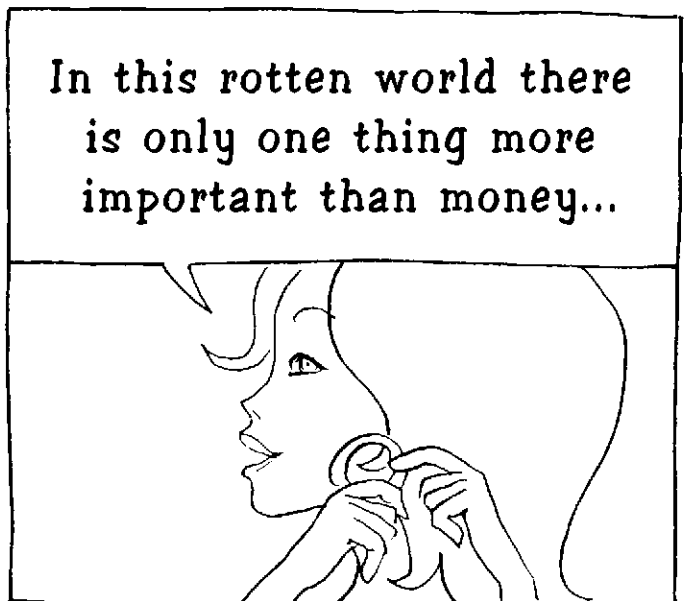
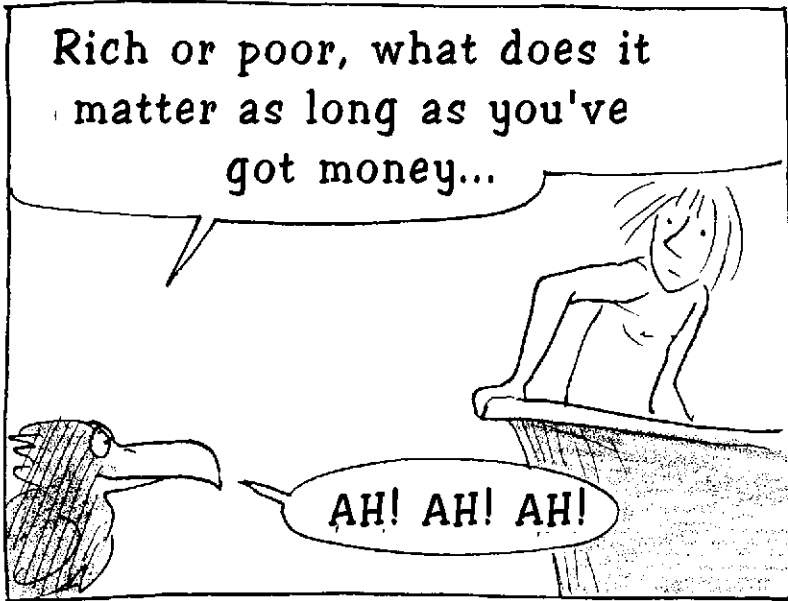
six hundred thousand gulbars!



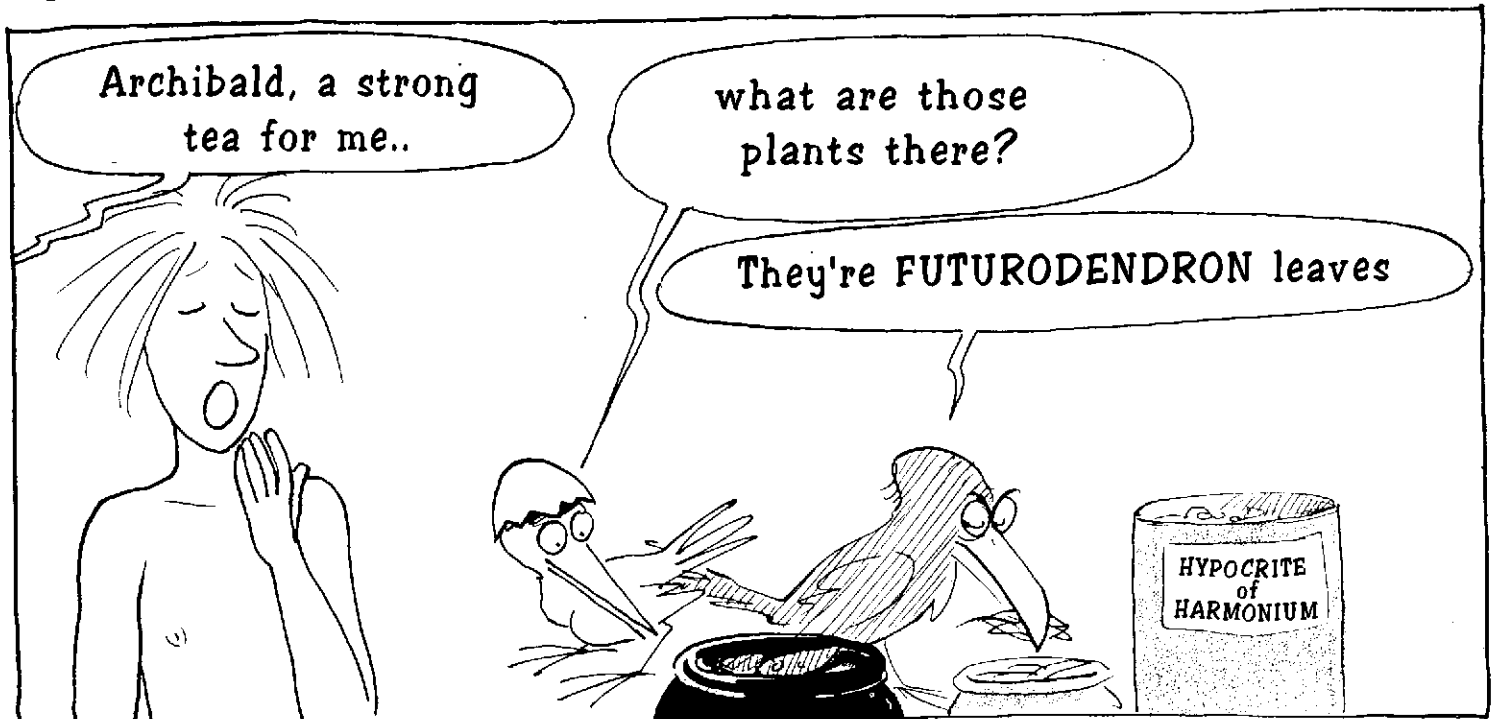
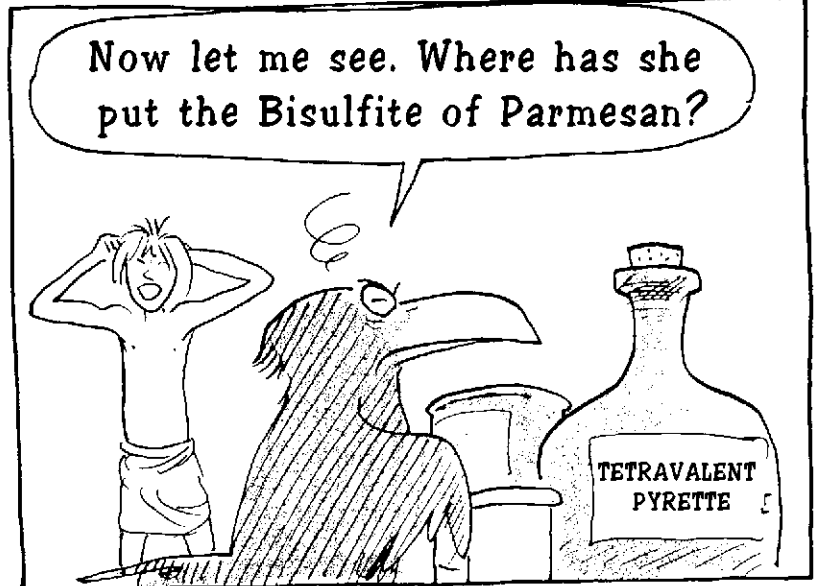
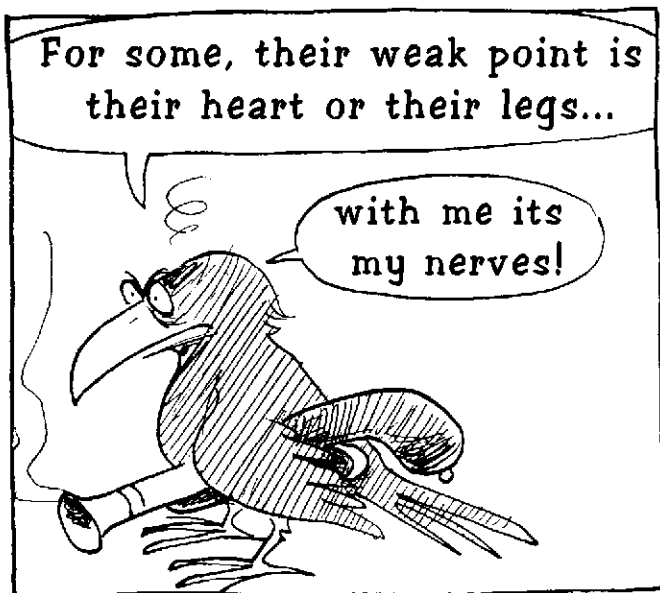
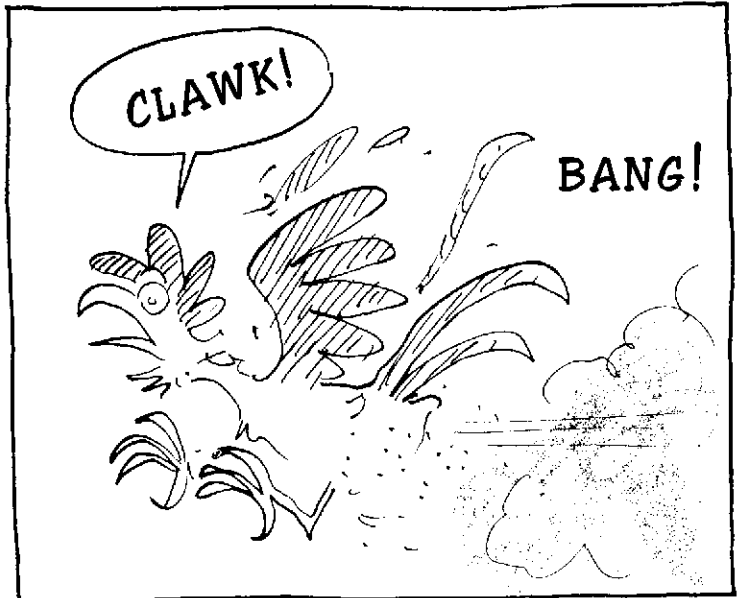
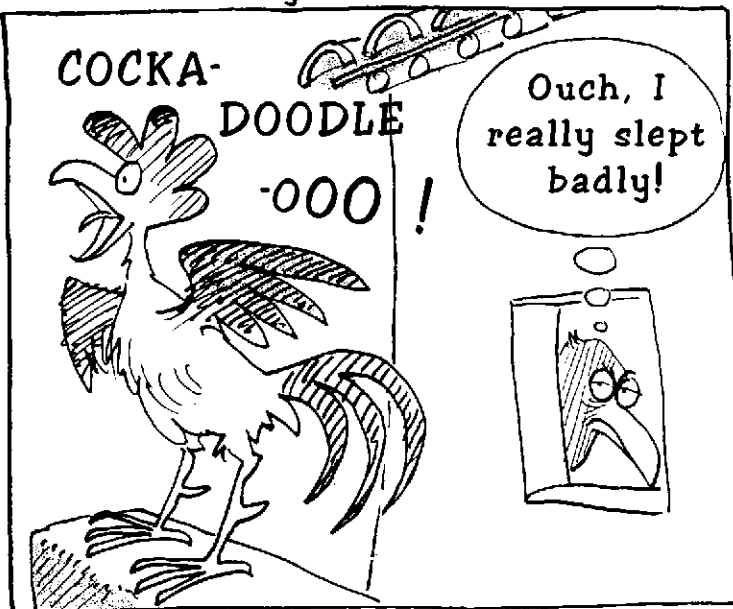
And...you believe in all that?

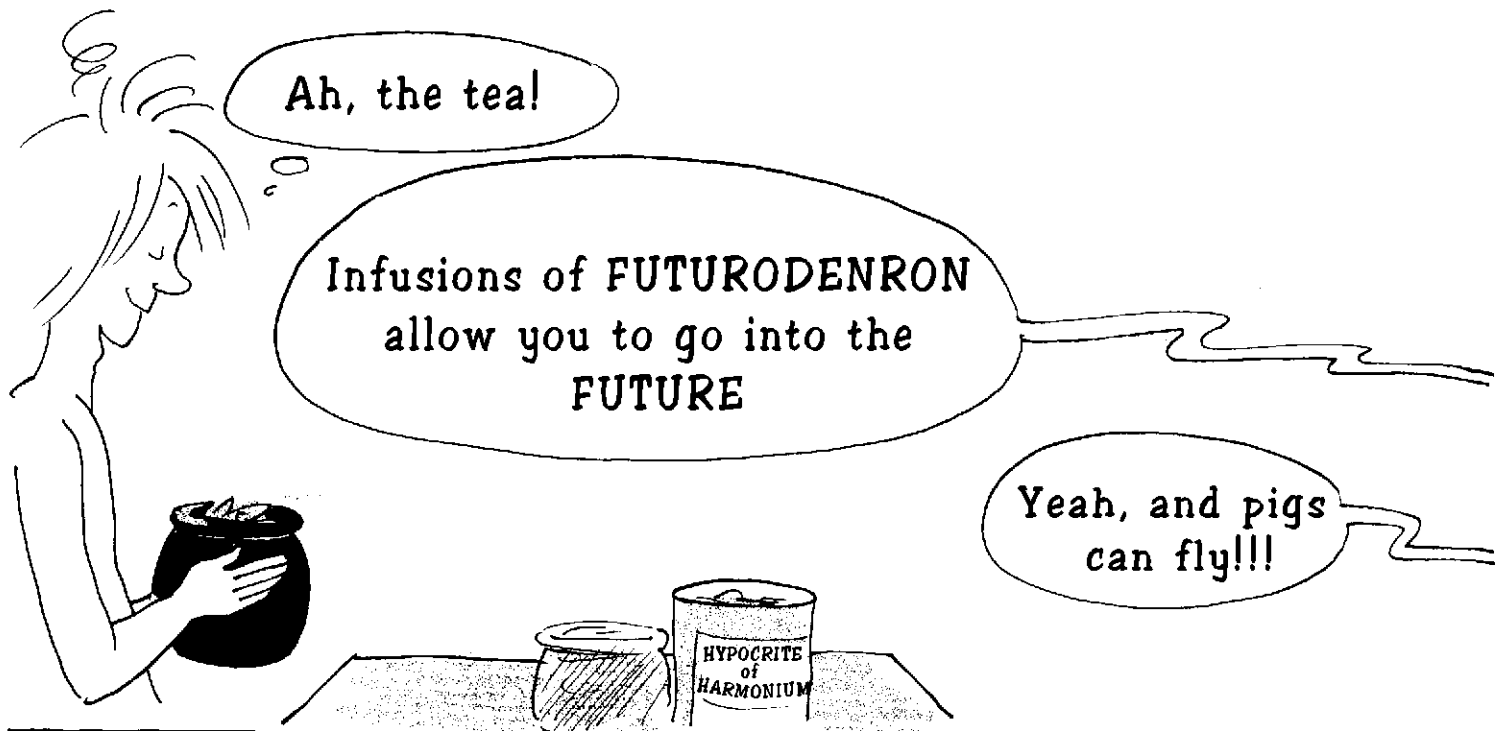


You have to live somehow you know.





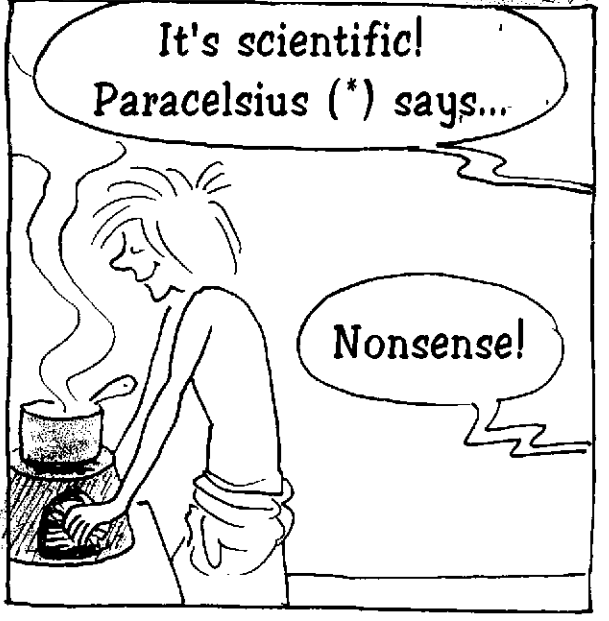




Ah, the tea!

Infusions of FUTURODENRON  
allow you to go into the  
FUTURE

Yeah, and pigs  
can fly!!!



It's scientific!  
Paracelsius (\*) says...

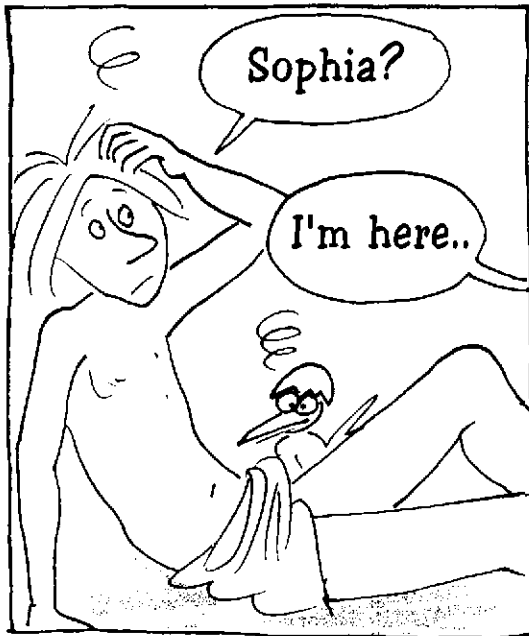
Nonsense!



What's happening?

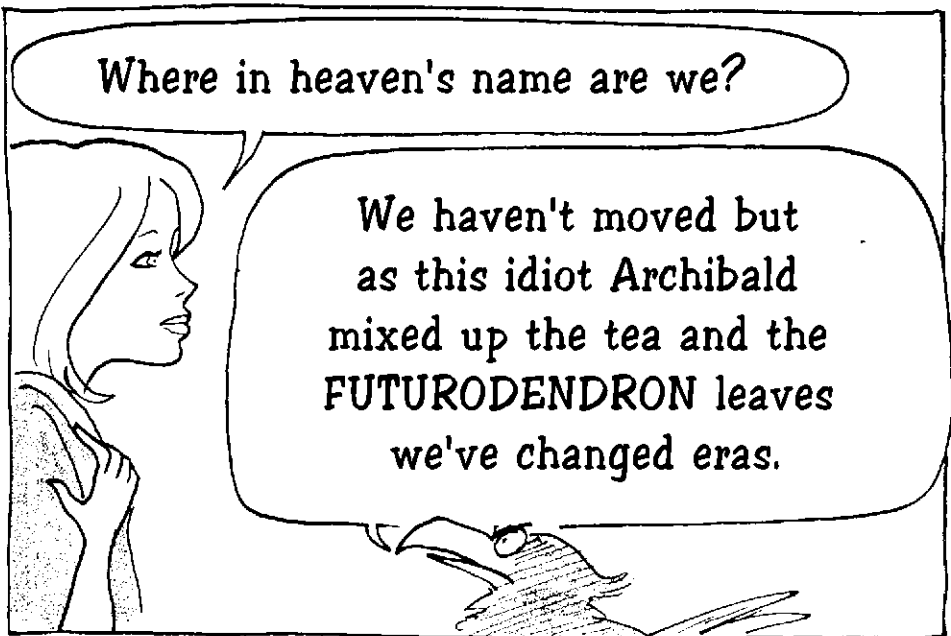
so what does  
Paracelsius say?

(\*) Famous alchemist



Sophia?

I'm here..



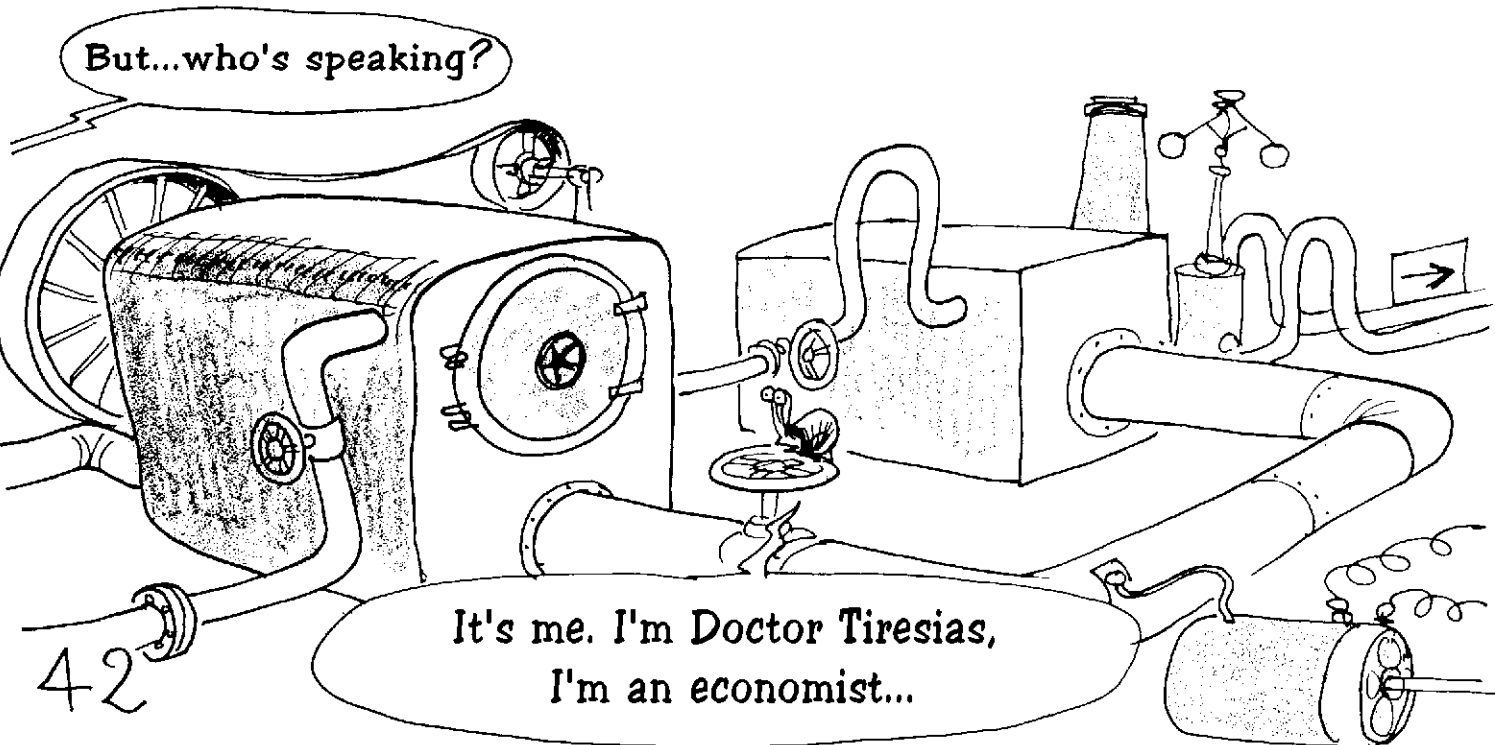
Where in heaven's name are we?

We haven't moved but as this idiot Archibald mixed up the tea and the **FUTURODENDRON** leaves we've changed eras.



Wow! Look at all this machinery!

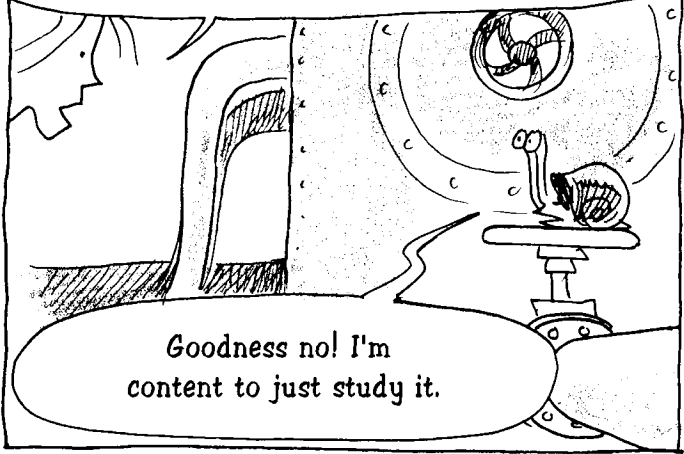
What! Haven't you ever seen an **ECONOMIC MACHINE** before?



But...who's speaking?

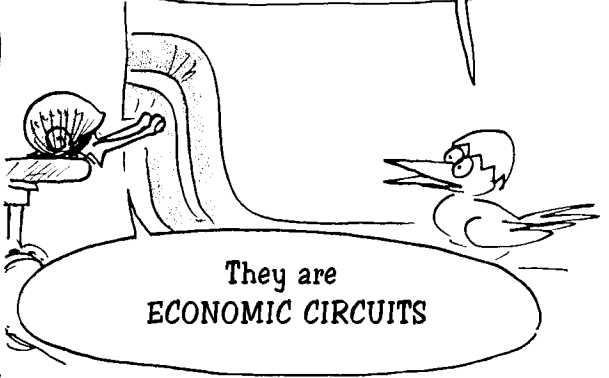
It's me. I'm Doctor Tiresias, I'm an economist...

You mean it's you who invented this machine?

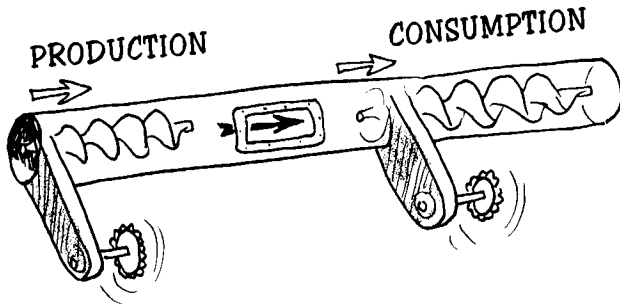


Goodness no! I'm content to just study it.

And what are all those pipe thingies?

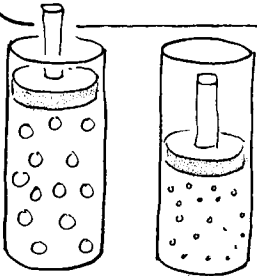


They are **ECONOMIC CIRCUITS**

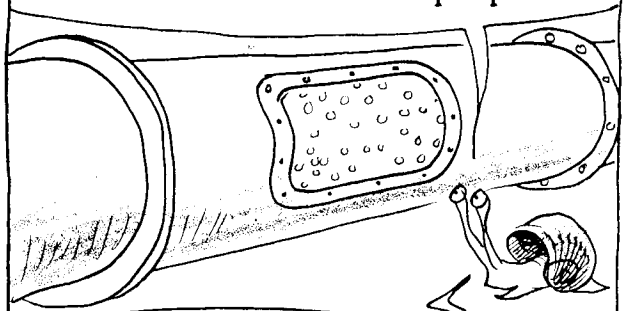


The economic fluid in the pipework, the **LOLLI**, is moved by two sorts of Archimedes screw pumps. The reverse pump is called **PRODUCTION**, and the forward suction pump is called **CONSUMPTION**

**LOLLI** is an emulsion of **ERGOL** and air. **ERGOL** (\*) is an **INCOMPRESSIBLE** fluid. But because there are bubbles in the mixture, makes the whole thing, the **LOLLI**, **COMPRESSIBLE**.



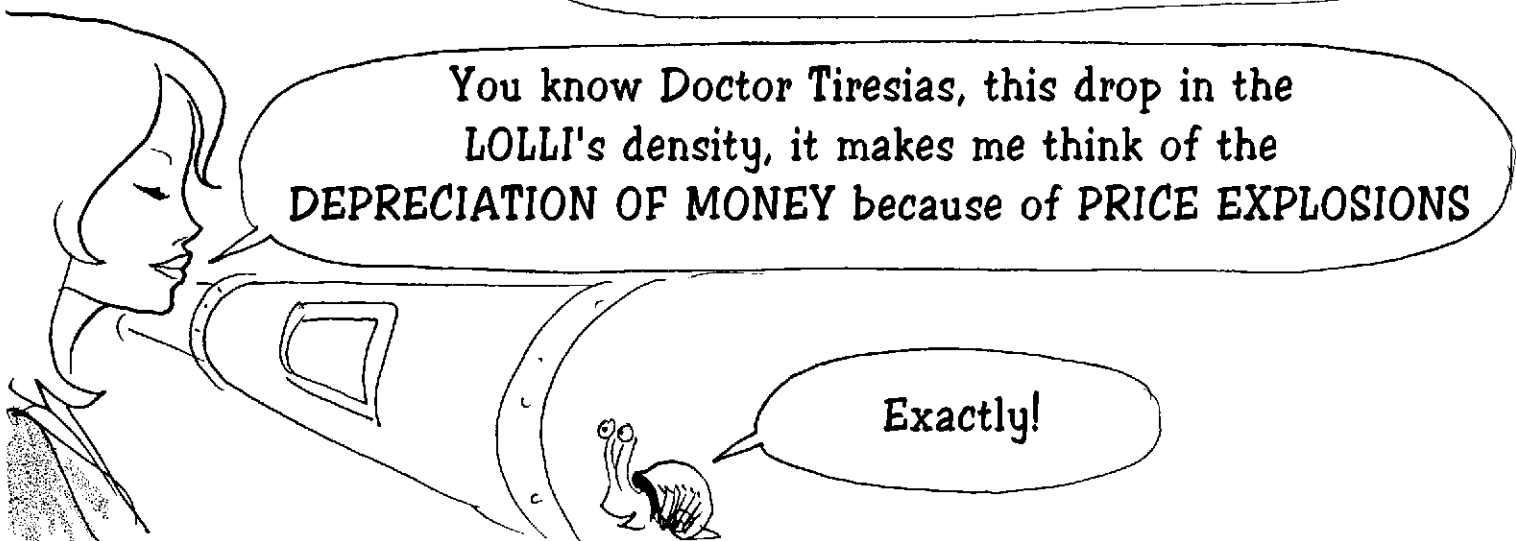
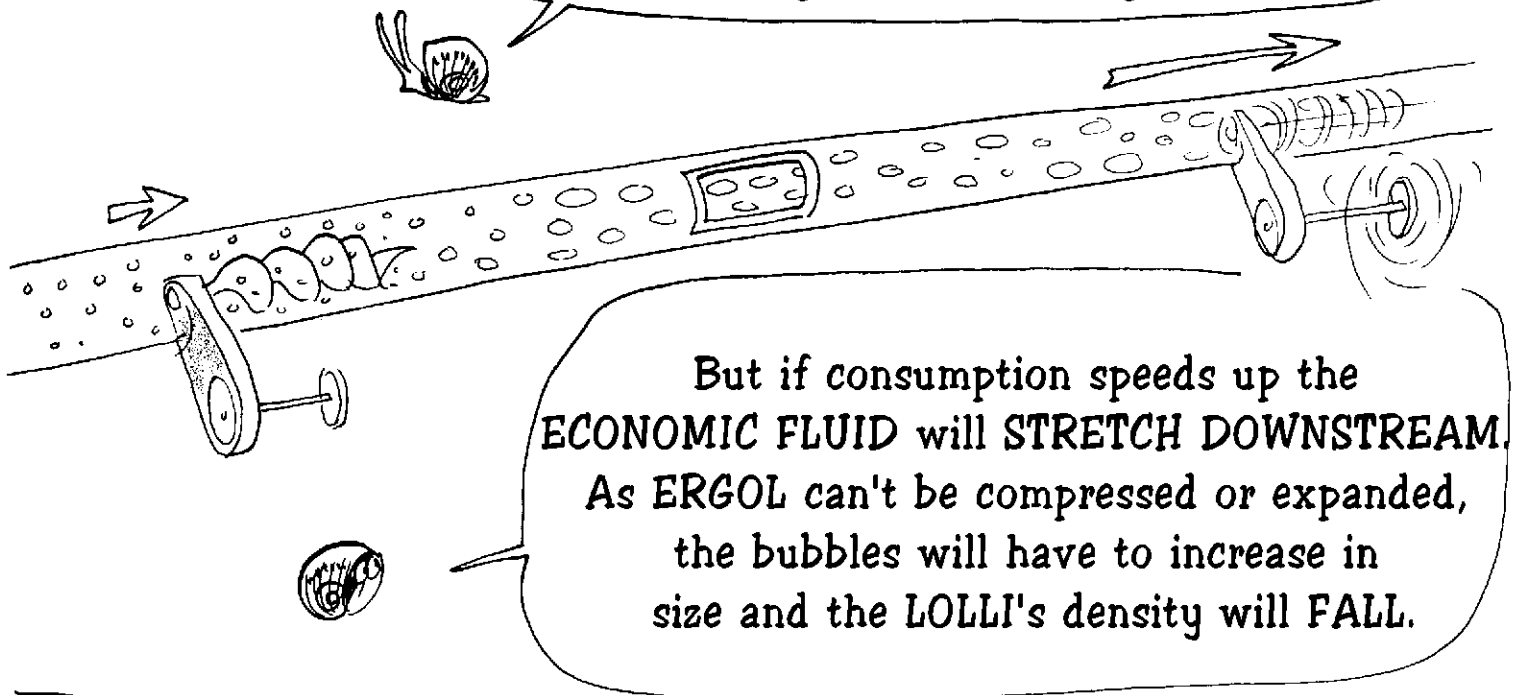
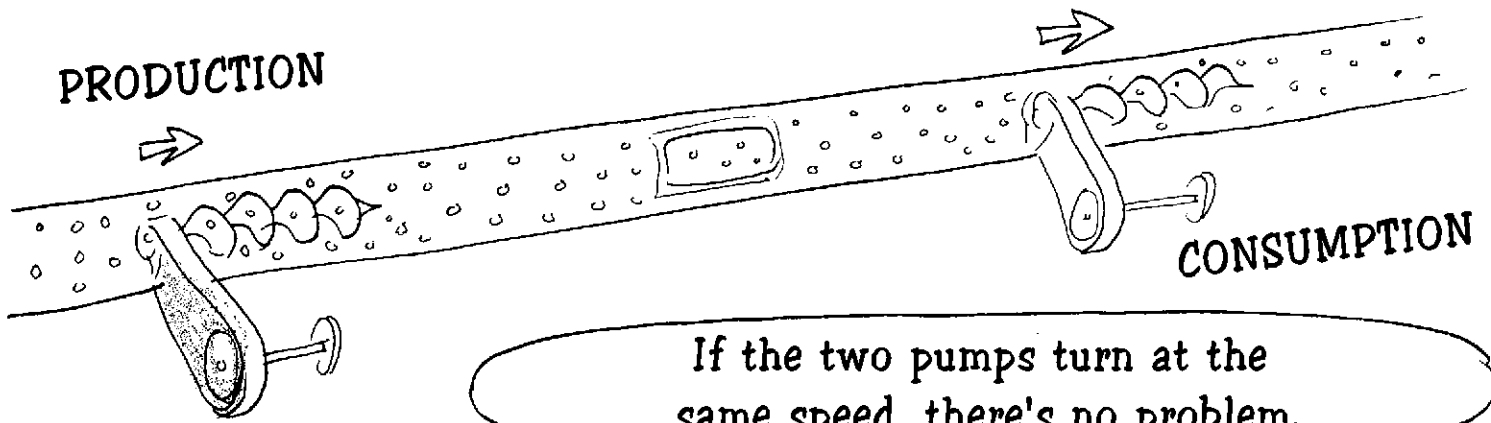
Between the **PRODUCTION** pump and the **CONSUMPTION** pump



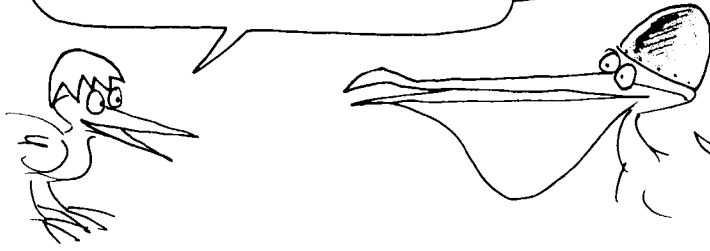
A window lets us see the **DENSITY** of the economic fluid.

(\*) From **ERGOS**, Greek for 'work'

# FIRST LAW OF LOLLODYNAMICS



The speed of the PRODUCTION pump is set by SUPPLY, while that of the CONSUMPTION pump is set by DEMAND.

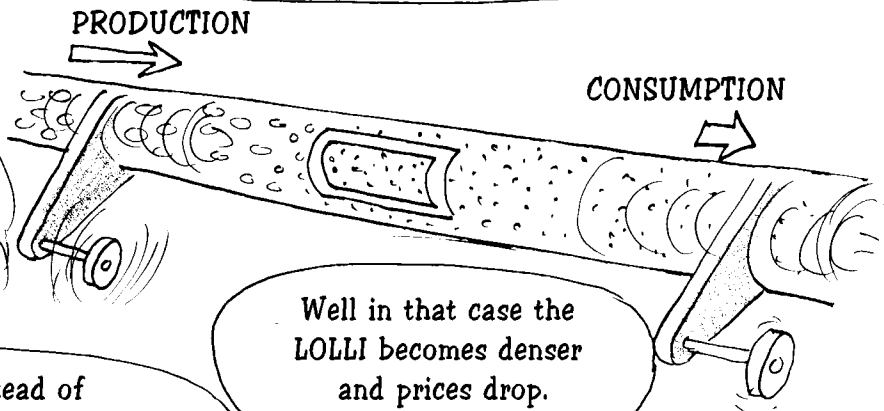
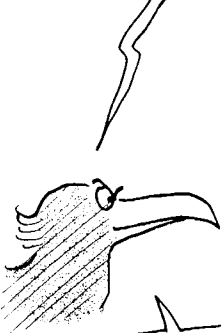


If they balance out or if they both vary in a SYNCHRONISED manner, the LOLLI keeps the same density: PRICES are STABLE.



If the CONSUMPTION pump starts to "pull more" and the LEVEL OF PRODUCTION doesn't keep up, THE LOLLI is stretched out, its density is reduced and PRICES CLIMB.

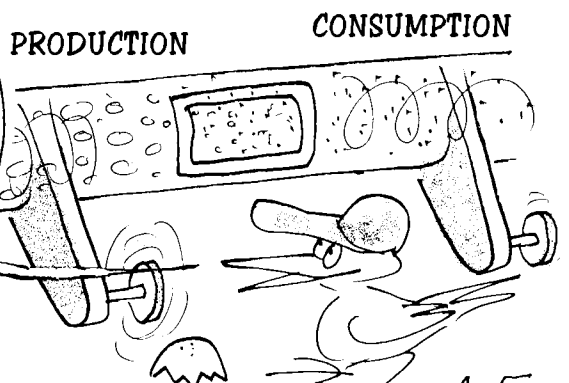
Yes but...



Well in that case the LOLLI becomes denser and prices drop.

What happens if instead of increasing, consumption SLOWS DOWN?

The same thing if there is a constant level of CONSUMPTION but PRODUCTION slows down: the LOLLI is thinned out and prices take off. When PRODUCTION speeds up, OVERPRODUCTION compresses the LOLLI and prices FALL.



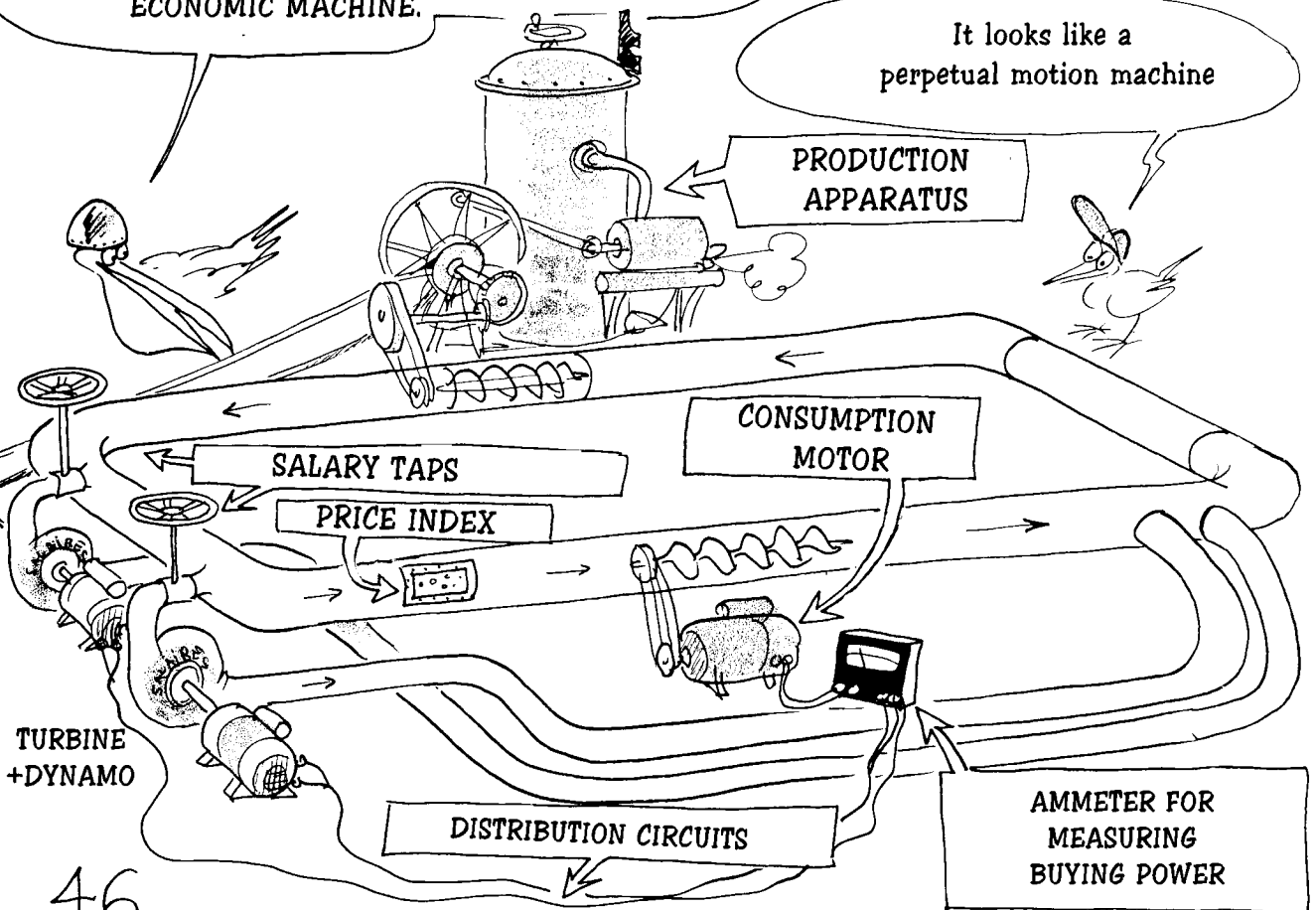
So prices fix themselves automatically according to the relation between CONSUMPTION AND PRODUCTION, between SUPPLY AND DEMAND.


A certain MASS OF ERGOL per second passes through the PRODUCTION pump. This MASS-FLOW is the same as that in the CONSUMPTION pump.

And the relation between the level of the consumption pump and the OUTFLOW VOLUME BY MASS OF ERGOL is called the PRICE INDEX.

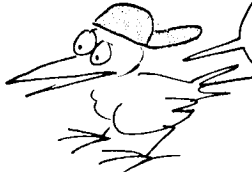
Let us have a closer look at this ECONOMIC MACHINE.

It looks like a perpetual motion machine





Of course it isn't  
a perpetual motion  
machine



Isn't that what  
I said?..

There is friction in the pipes, losses in the electric  
lines. The thing only works because of an input of  
**ENERGY.**

## **SECOND LAW OF LOLLODYNAMICS**

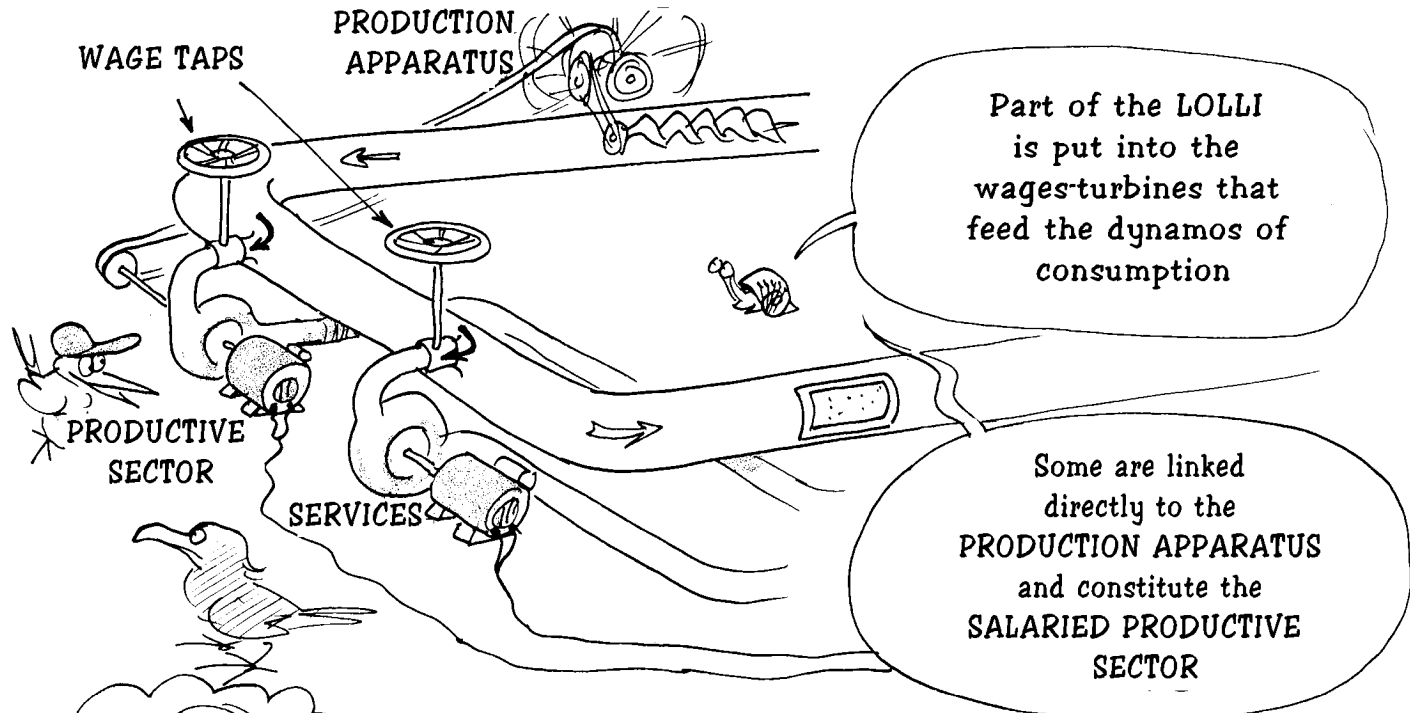
The second law of  
Lollodynamics can be expressed as:  
**AN ECONOMIC MACHINE CANNOT  
EXIST IN ISOLATION**

People buying, selling and  
distributing objects is not  
enough. Somewhere or other there  
has to be **PRODUCTIVE WORK**, using  
raw materials and energy in some form.

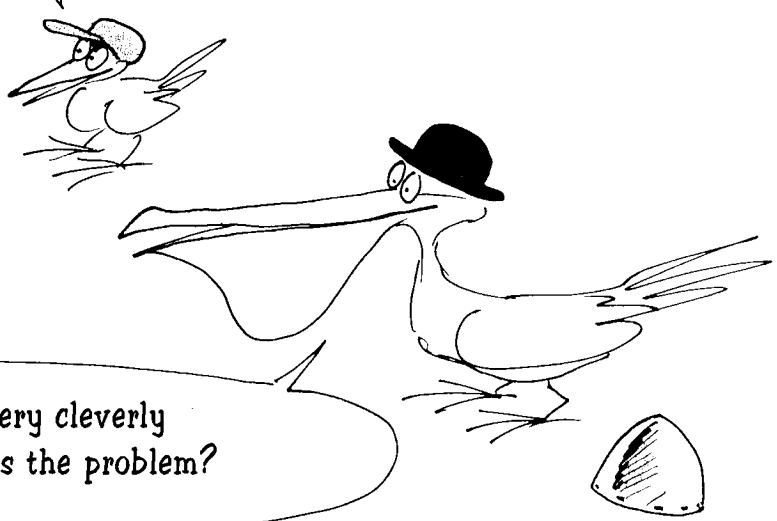
That seems  
obvious.



# PRODUCTIVE AND NON-PRODUCTIVE SECTORS

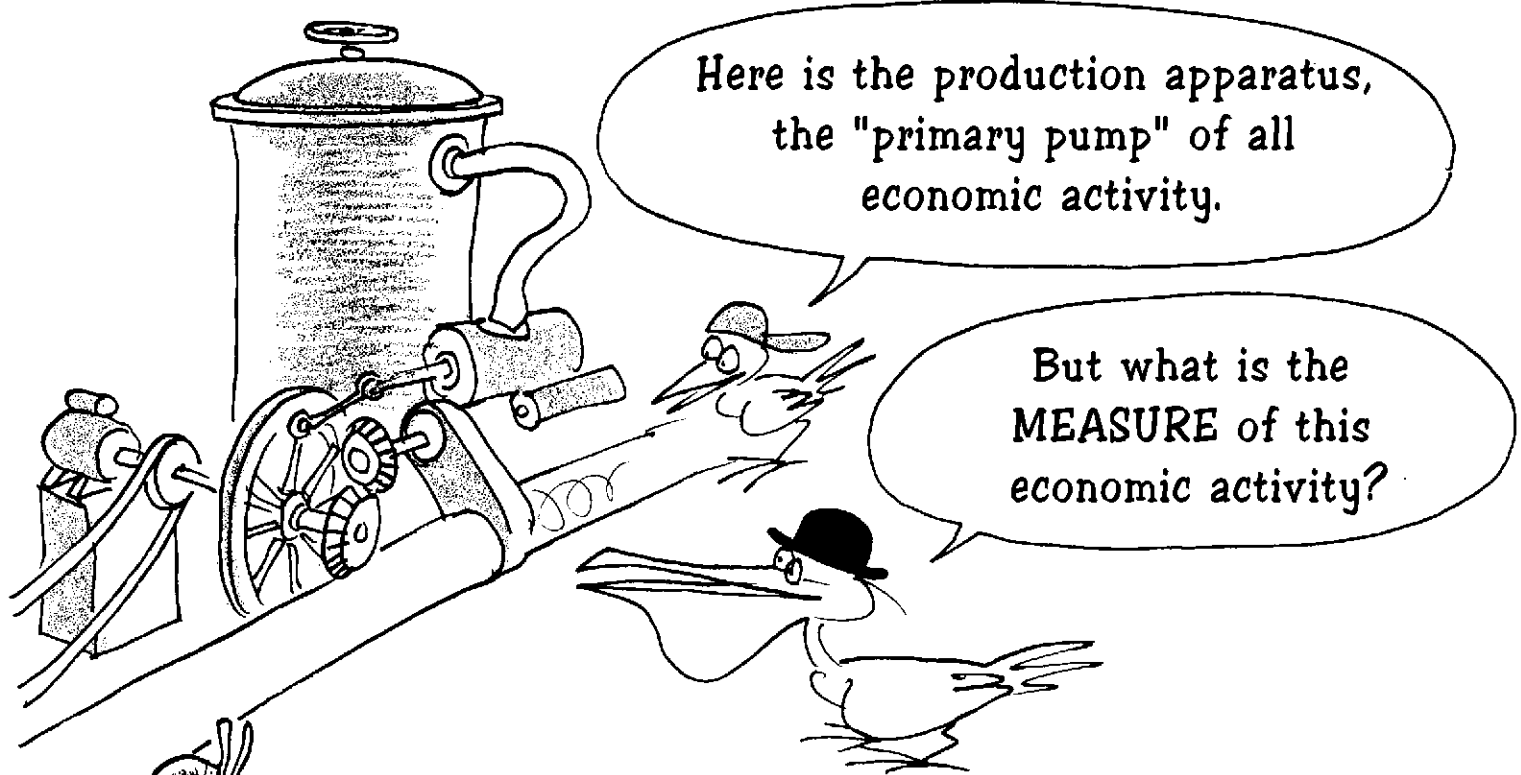


So workers have to put their nose to the GRINDSTONE, which is why it is called the DAILY GRIND.



That all seems very cleverly worked out. Where's the problem?

# PRODUCTIVITY

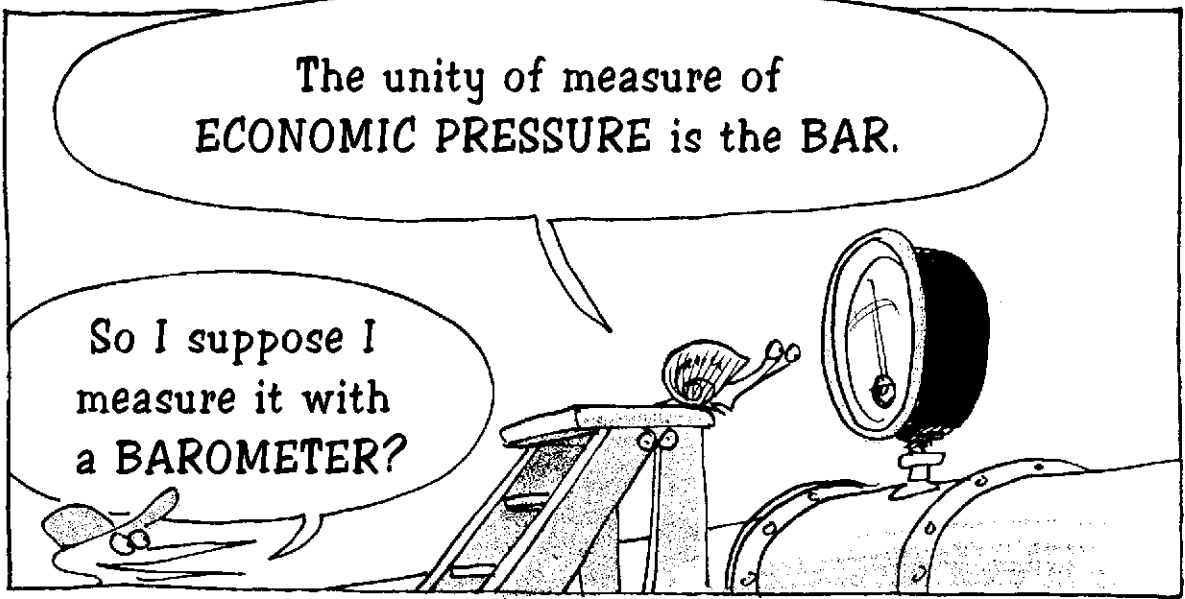


Here is the production apparatus, the "primary pump" of all economic activity.

But what is the MEASURE of this economic activity?

Well, ECONOMIC ACTIVITY is equal to  $\frac{1}{2}$  MASS OF ERGOL x (CIRCULATION SPEED)<sup>2</sup>

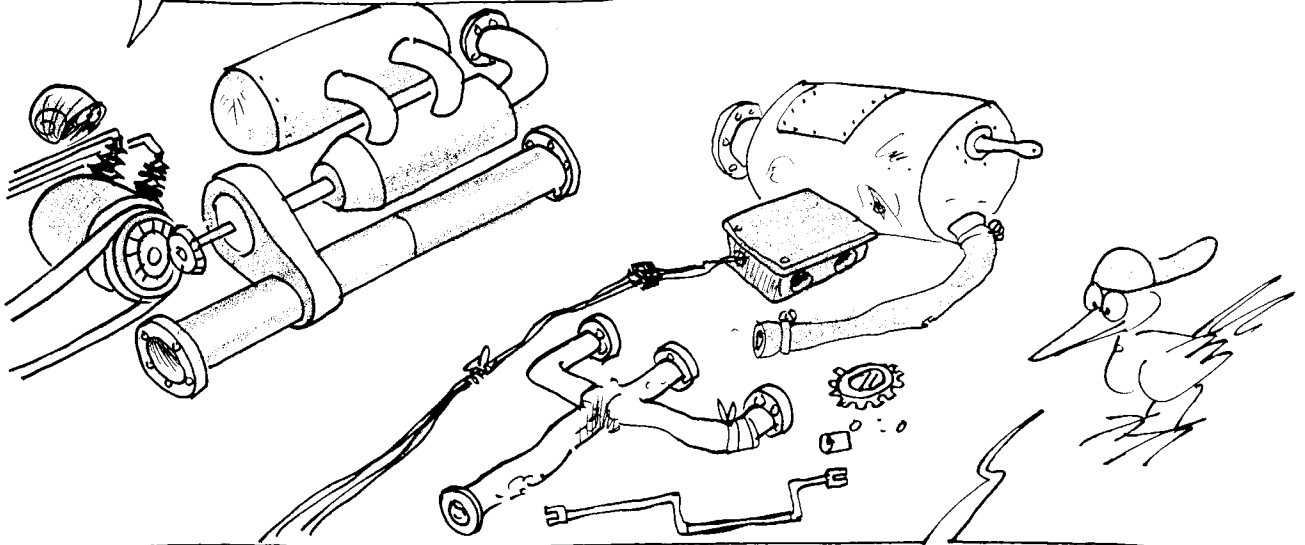
That's a force to be reckoned with.



The unity of measure of ECONOMIC PRESSURE is the BAR.

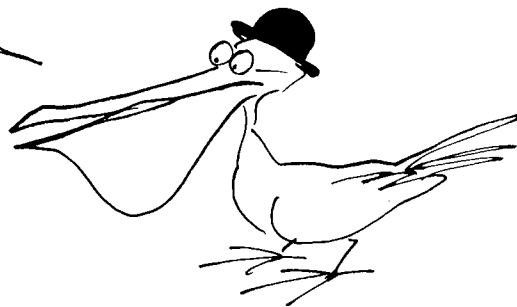
So I suppose I measure it with a BAROMETER?

To increase economic activity the MASS OF ERGOL can be increased, that is to say the AMOUNT OF WORK SUPPLIED, but is also essential to improve the ways that this work is used and distributed, in other words, increase PRODUCTIVITY.



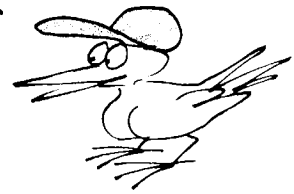
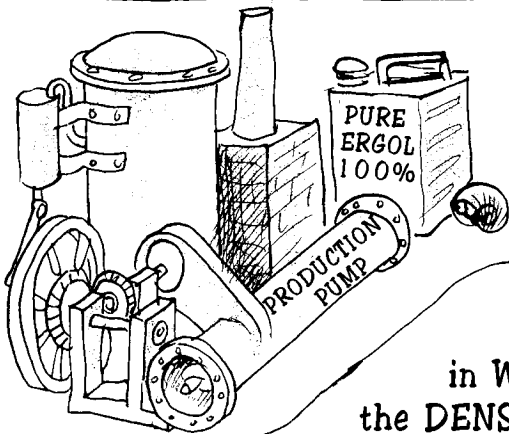
Yes, better to use a bigger, more modern machine, with very wide diameter pipes and thick electric conductors rather than doubling or tripling old installations.

But one thing remains mysterious to me? Who fixes the amount of LOLLI circulating in the economic machine?



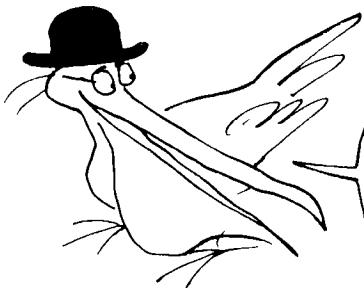
# GROWTH AND MONEY SUPPLY

The REAL state of an ECONOMIC SYSTEM is the MASS OF ERGOL circulating in it. It is the dense fraction of LOLLI, the WORK FORCE and the ERGOL'S SPEED OF FLOW. What happens if we add a new PRODUCTION UNIT to the machine?



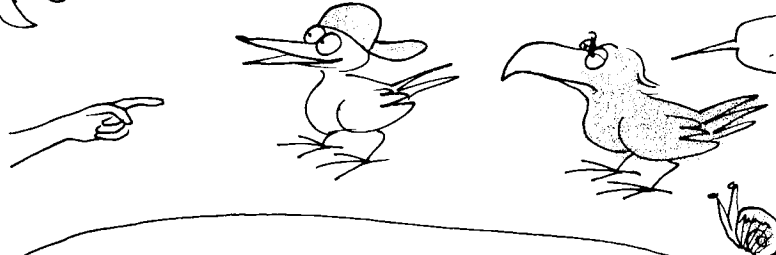
This production tool is delivered with a full tank of ERGOL so there is an increase in WORKFORCE which naturally tends to increase the DENSITY OF THE LOLLY (and so make prices fall).

It's normal, in a growth phase, to add a few bubbles, that is to say, increase the MONETARY VOLUME, in order to maintain PRICE STABILITY.



In fact I bet they add a few more bubbles each time without us noticing, which means that it catches up a bit with wage rises

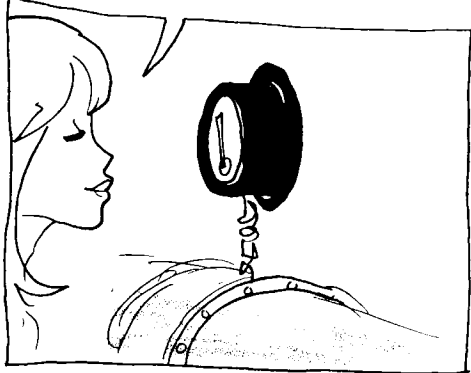
Right, so let's suppose that we are in a growth phase. Max, you can play the role of an employee in the productive sector and you Albert, you can be an employee in the non-productive sector.



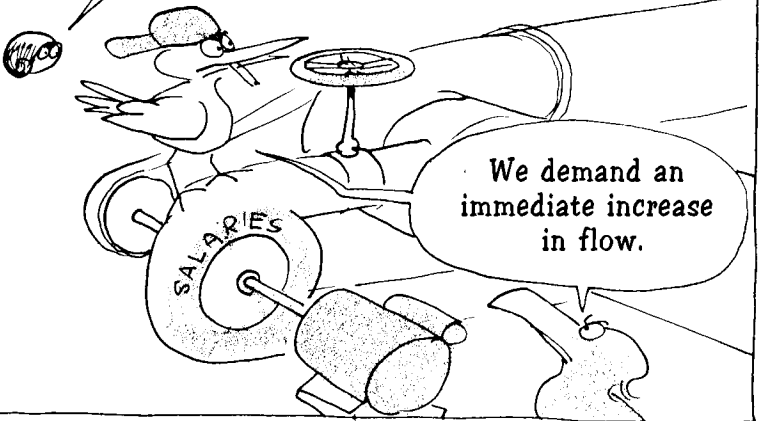
Why non-productive?..

You represent **SERVICES** and **ADMINISTRATION**.

So a new unit of production has been added to the economic machine and is working well. Plus twelve bars on the economic pressure indicator

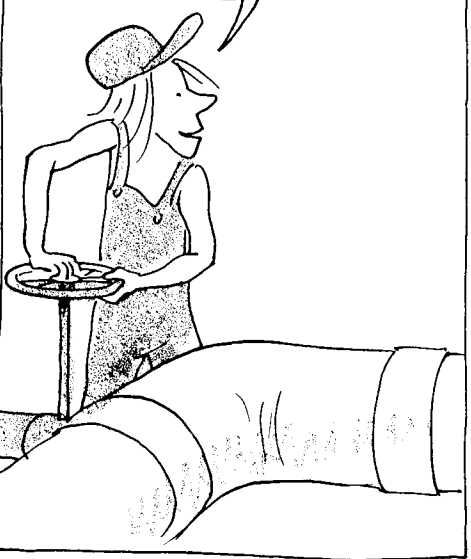


Setting up this unit gave **EMPLOYMENT** and so reduced **UNEMPLOYMENT**, but wage claims became stronger



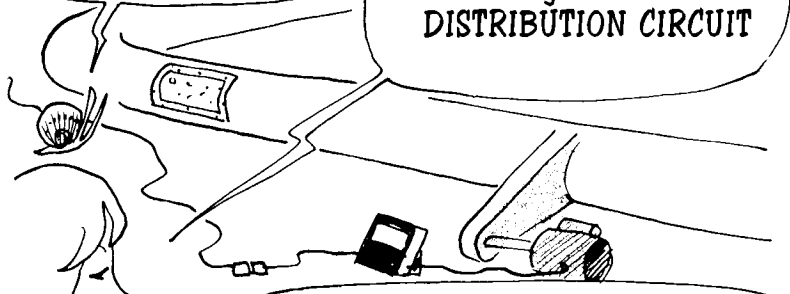
We demand an immediate increase in flow.

OK, I'm gradually increasing the flow



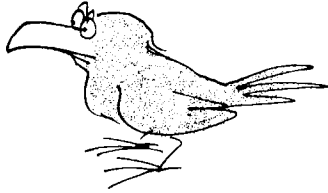
PRICES...OK... gently does it...

Intensity is increasing. Not many losses in the **DISTRIBUTION CIRCUIT**



As the flow of **ERGOL** in the distribution pump increases the **STANDARD OF LIVING** will rise.

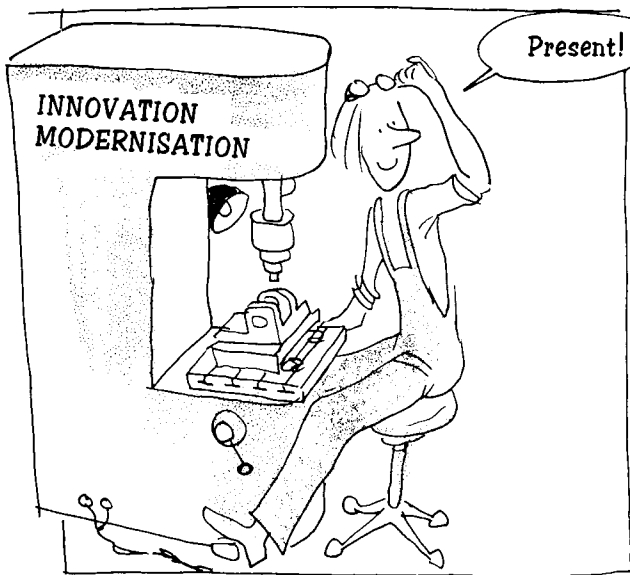
But this new production unit didn't build itself did it?



No, you're right. Part of the inner force of the Lolli has to be siphoned off to use for the INNOVATION and MODERNISATION of PRODUCTION

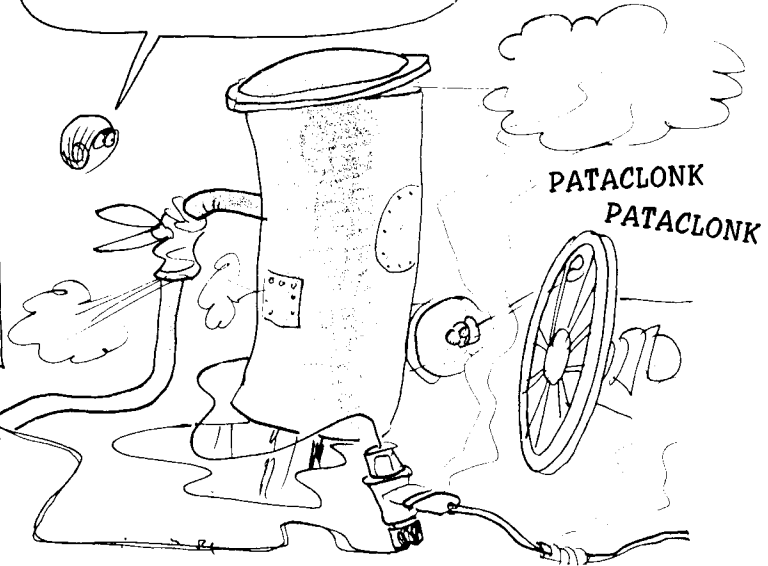


# INVESTMENT



Present!

The effort has to be permanent otherwise the production apparatus gets old immediately.



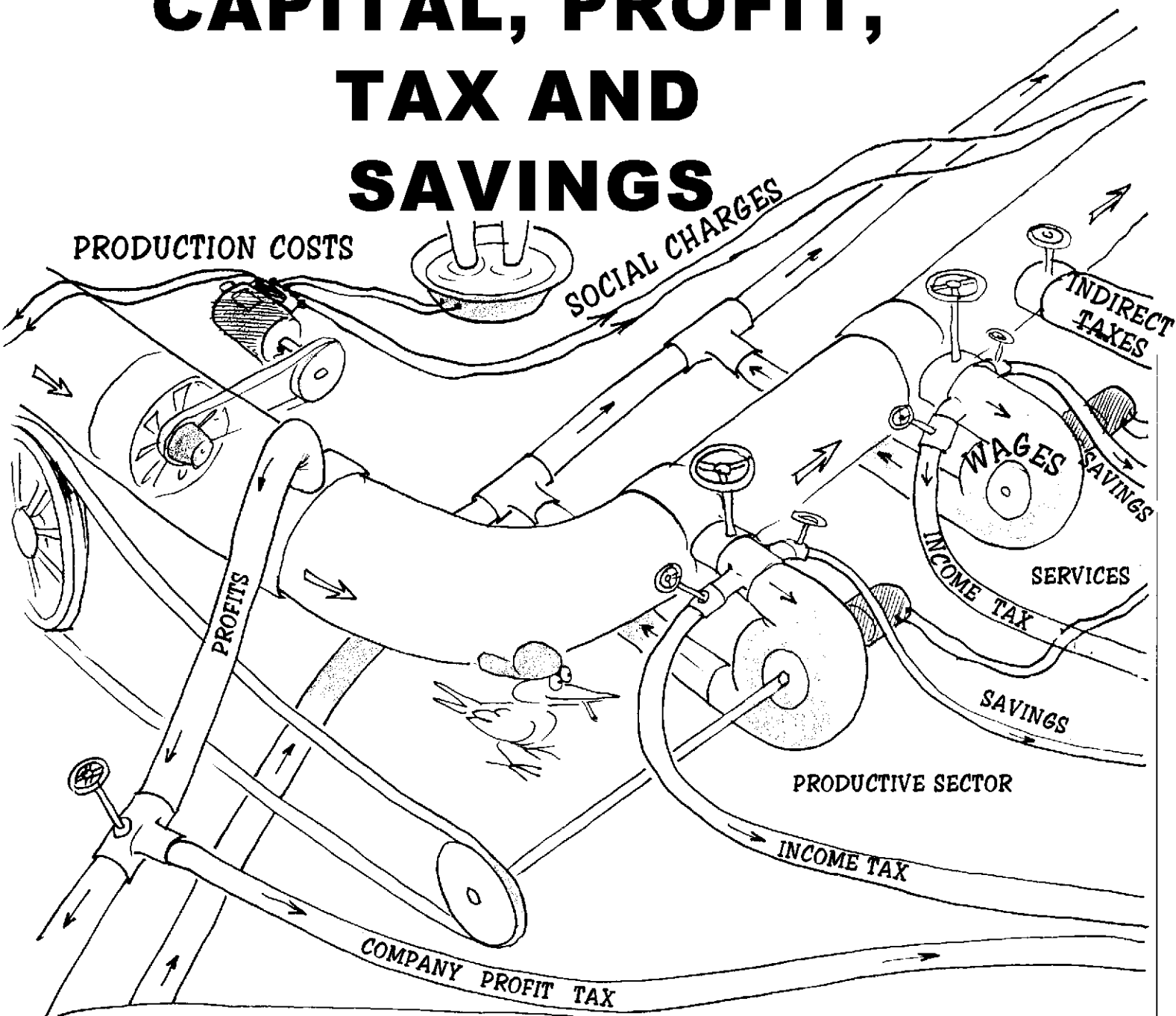
PATACLONK  
PATACLONK

Completely done for

the pipes are blocking up

the electric circuits (DISTRIBUTION NETWORK) are being eaten away, there are leaks everywhere

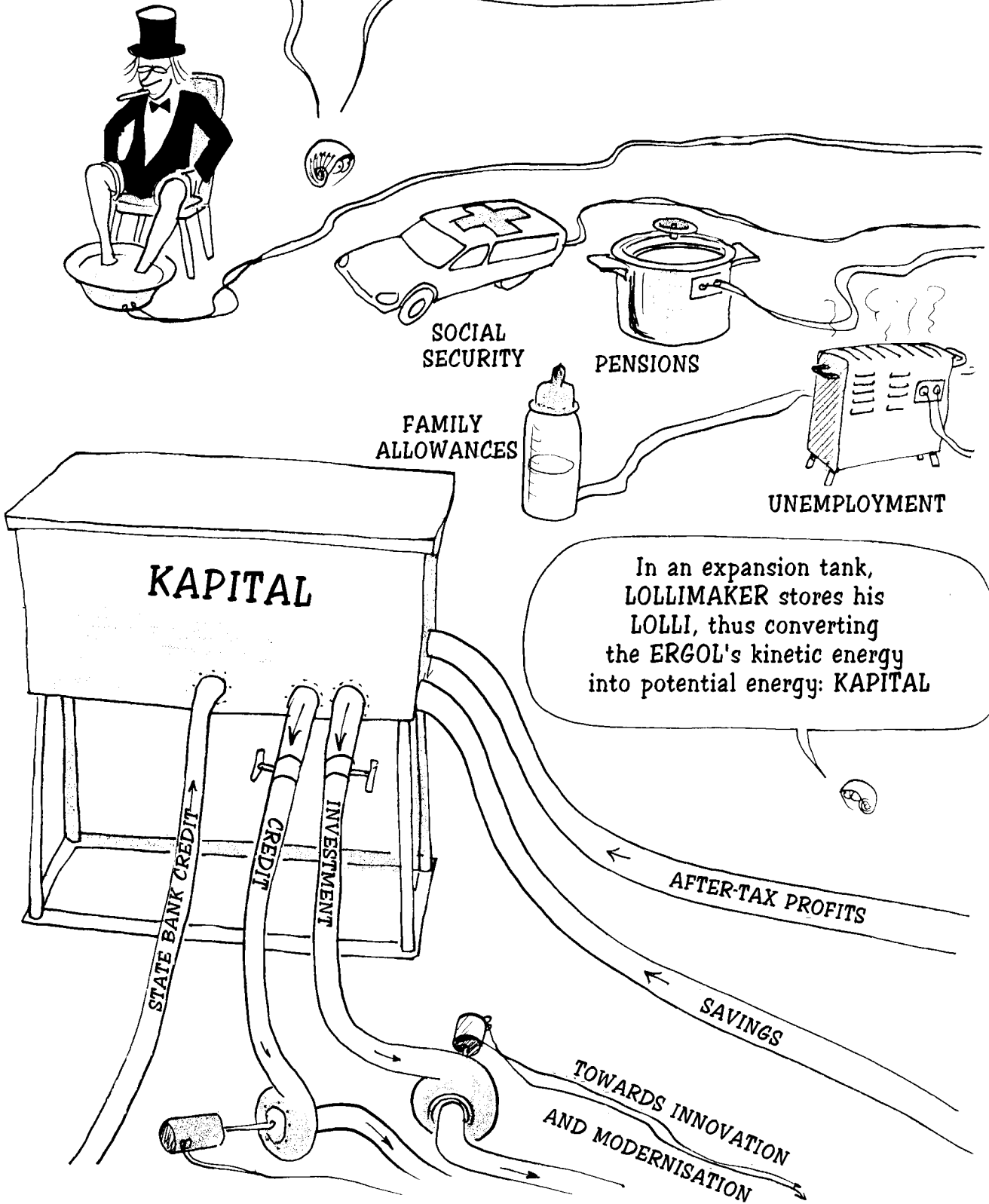
# CAPITAL, PROFIT, TAX AND SAVINGS



The circulation of LOLLI is burdened with many diversions and various charge losses. The ergol drives a turbine linked to a generator, immediately downstream of the production pump. Part of the energy thus used is sent into the charge circuit called SOCIAL CHARGES. Another part goes into PRODUCTION COSTS and the rest is used to warm Mr LOLLIMAKER's footbaths.

Here on one side  
we have Mr LOLLIMAKER

and on the other the  
SOCIAL CHARGES circuit

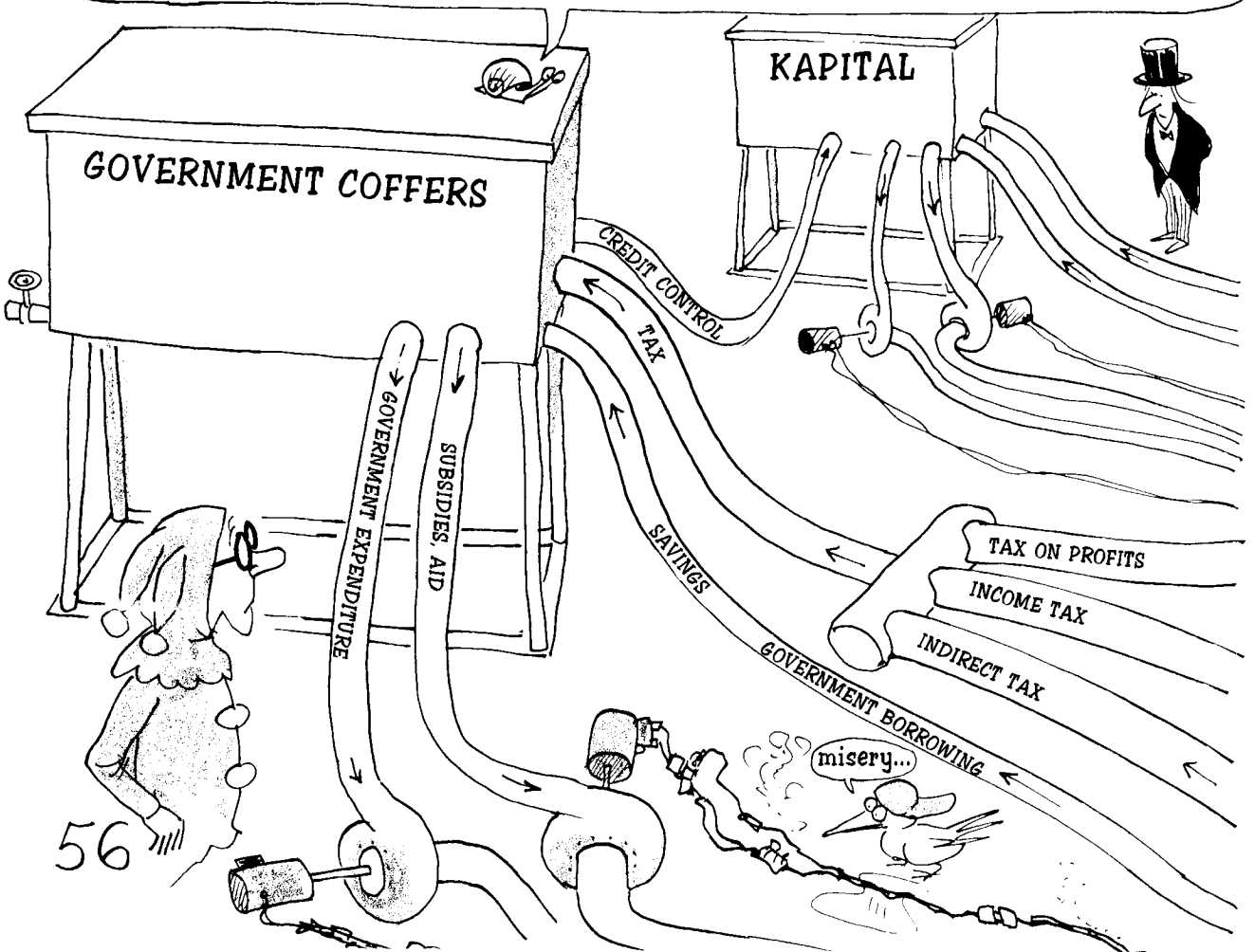




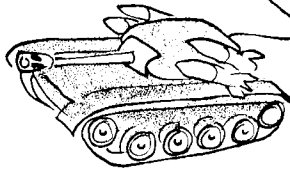
The KAPITAL TANK is fed by AFTER-TAX PROFITS and by something we call SAVINGS

And conversely, LOLLI in the expansion tank can be sent to two turbines, linked to generators, one feeding my machine, that's innovation and modernisation, the other is called COMMERCIAL CREDIT.

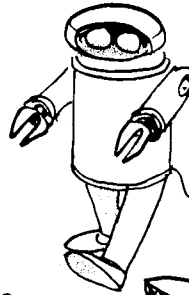
On his side the SINISTER OF FINANCE has a similar tank. It's fed by taxes. First is TAX ON PROFITS. Then a DIRECT TAX, on INCOME and finally, upstream of the CONSUMPTION PUMP, an INDIRECT TAX, such as VALUE ADDED TAX.



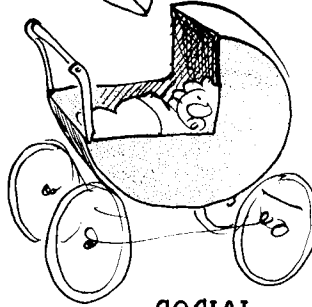
Ah, here is some.  
**GOVERNMENT EXPENDITURE**



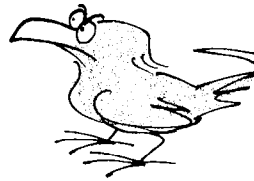
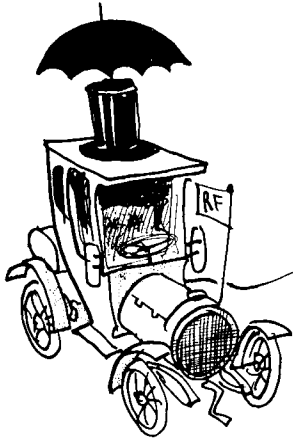
**ARMY**



**EDUCATION-RESEARCH**

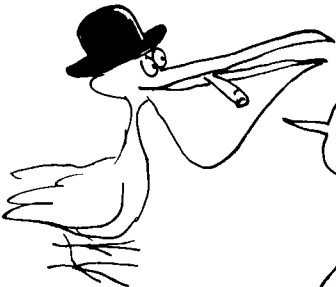


**SOCIAL**



I suppose that's  
the **STATE CARRIAGE**.

And **SAVINGS, CREDIT,**  
how do they work?

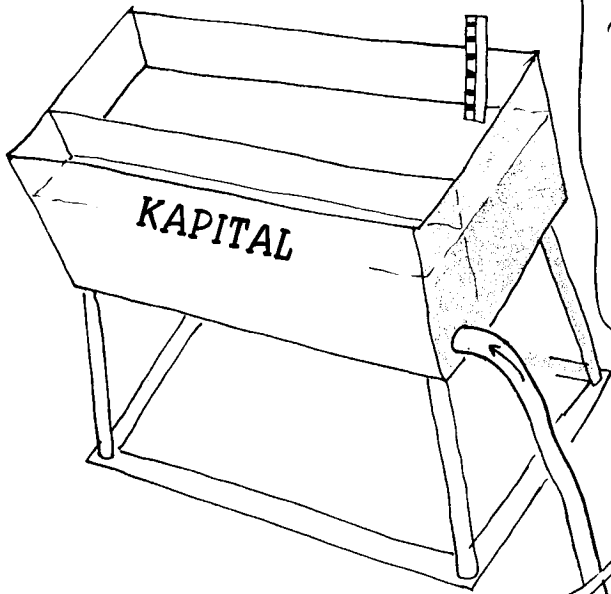


In theory, all these expansion tanks, **KAPITAL** and  
the **STATE COFFERS**, have a **REGULATORY FUNCTION**. We  
saw that the **ECONOMIC MACHINE** was **UNSTABLE**, because  
of the constant interaction between **PRODUCTION** and  
**CONSUMPTION**, the latter always having a tendency to  
race and cause **PRICE** rises.



So wage-earners are encouraged to put  
their **LOLLI** in the two expansion tanks...



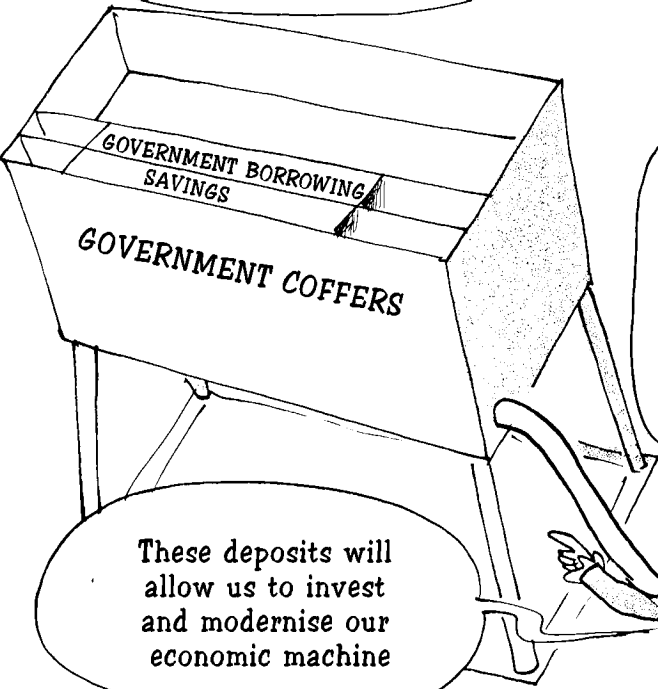
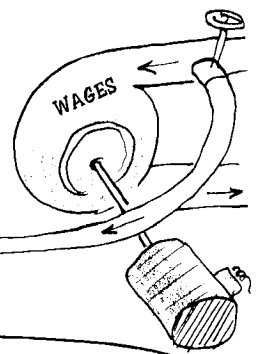


There is no reason why you shouldn't participate in this wonderful movement of growth in our economy. I'll offer you a special compartment (\*) in my LOLLI trough where you can put yours. In that way the level will follow the general increase in the volume of KAPITAL



There's no risk. I'll guarantee you a certain annual income. Make your LOLLI work for you.

These deposits will allow us to invest and modernise our economic machine



Put your LOLLI in a safe place, think of your FUTURE. I'll guarantee you a certain annual income and if you invest your savings for long enough, I'll do a little something for you concerning taxes.

These deposits will allow us to invest and modernise our economic machine

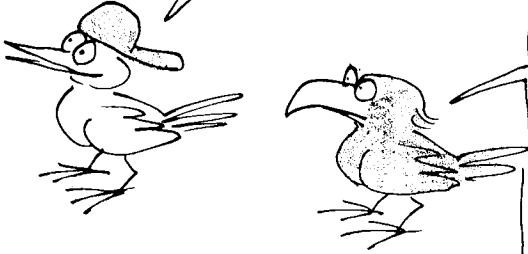


Hmm...

(\*) Private banks, stocks and shares

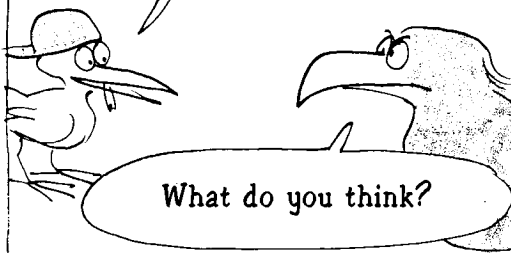
A SHORT WHILE LATER...

They don't give us much but look, the volume has gone up slightly all the same.



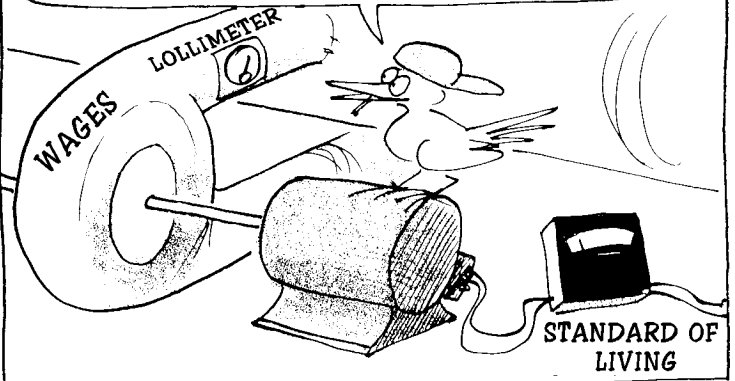
You're too naive. Economic activity is increasing. New production units are being built as there is growth in the total mass of ERGOL, but they put so many bubbles in the mix that the DENSITY of the LOLLI never stops falling. In the end you lose out.

Do you mean that when we have saved, increased the amount of ERGOL, the dense part of the mix FALLS instead of increasing?



What do you think?

But our wages have gone up, look, the flow has almost doubled.



But all these turbines, it's just WIND, LOLLI that is less and less dense. Look at the intensity!

CONSUMPTION PUMP



That hasn't gone up much has it?

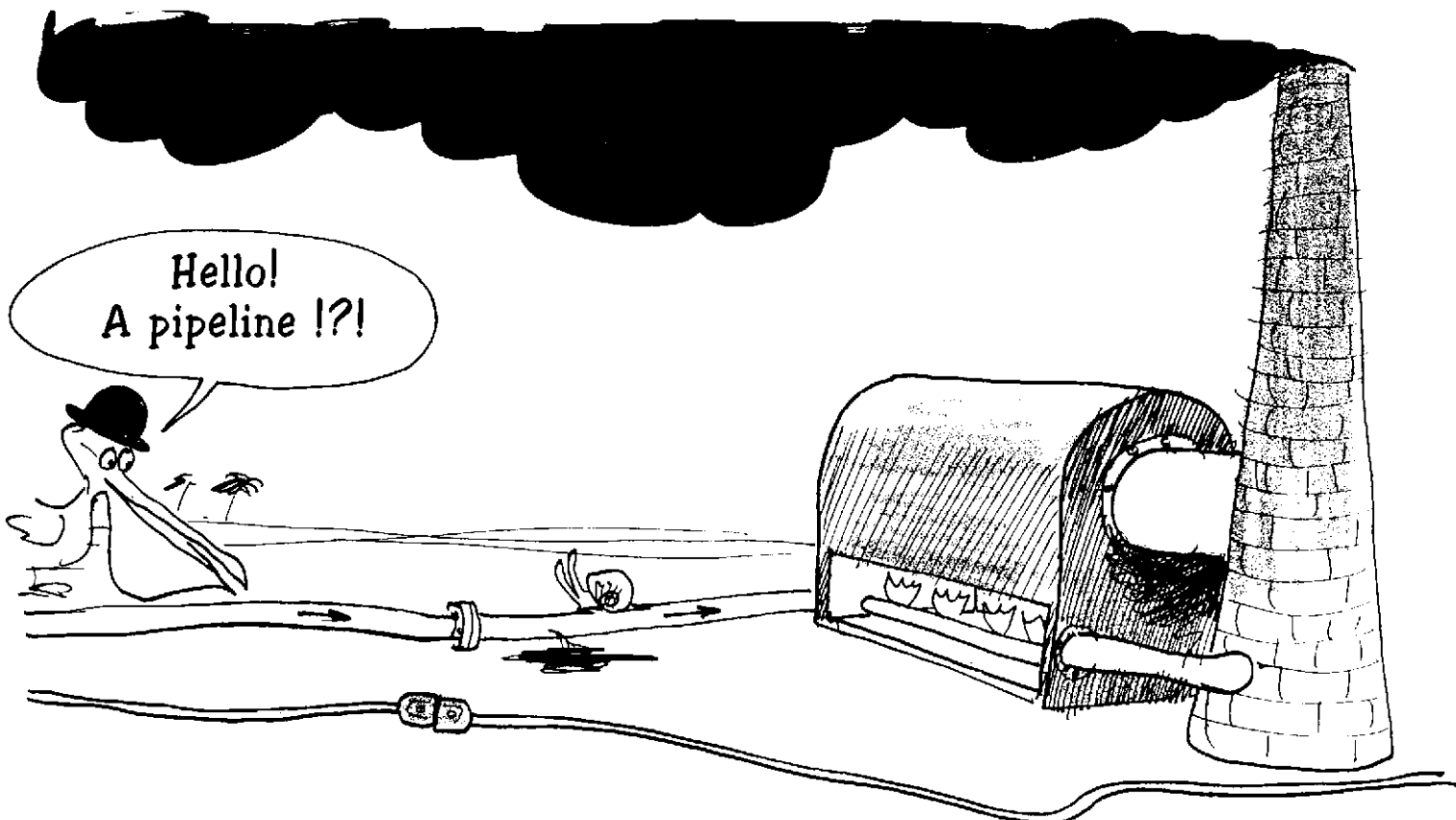
Real **ECONOMIC GROWTH** isn't the volume of **LOLLI** but of the **ERGOL** contained in it.  
The same for the **STANDARD OF LIVING**, it's not the flow rate (wages) but it's intensity (**BUYING POWER**).

Well isn't there another way to put **LOLLI** aside?

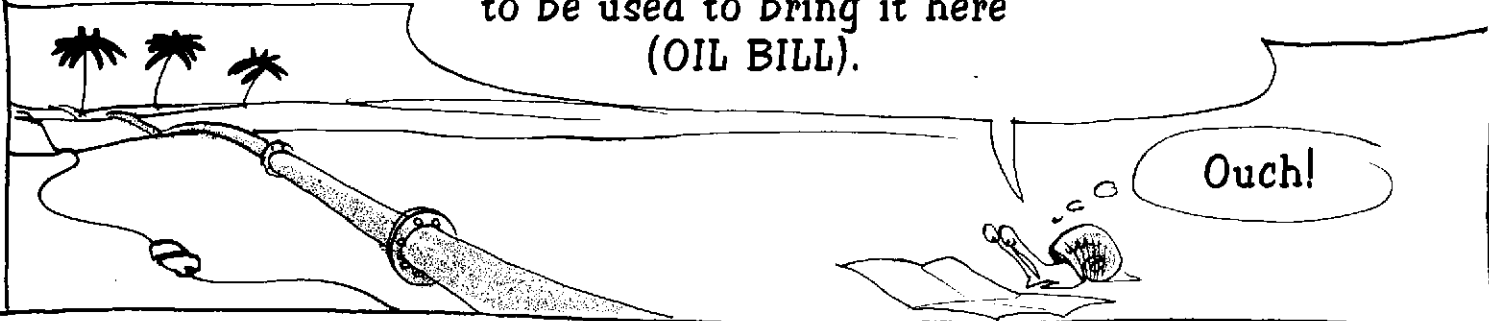
To ensure it has a **CONSTANT MASS** all you need to do is freeze it.

Good idea. To avoid **INFLATION**, the evil that eats away at economies, we just need to freeze everything!

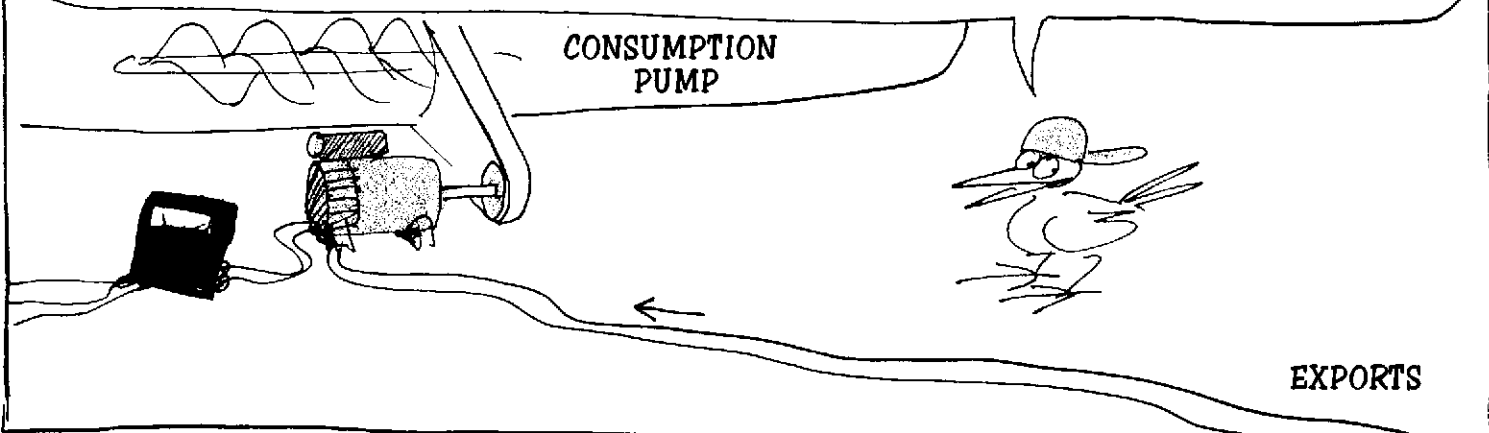
Yes but then **LOLLI** loses all its interest, which is in its **FLUIDITY**, the **FREEZING OF CAPITAL** would block the economic machine completely



The boiler of the economic machine is heated with that precious liquid that comes from a faraway, desert region. A great deal of energy needs to be used to bring it here (OIL BILL).



In exchange, the line coming from the desert is always fed, good day and bad, by the CONSUMPTION PUMP (EXPORTS) (\*)



(\*) The INTERNATIONALISATION OF THE ECONOMY will be covered in another album: THE INTERNATIONAL INFLATOTRON.

# THE PETROL CRISIS

Ah, there's the SINISTER



Lets have a look at the post.



oh dear!..



Oh dear, oh dear!..



They've put the price up!

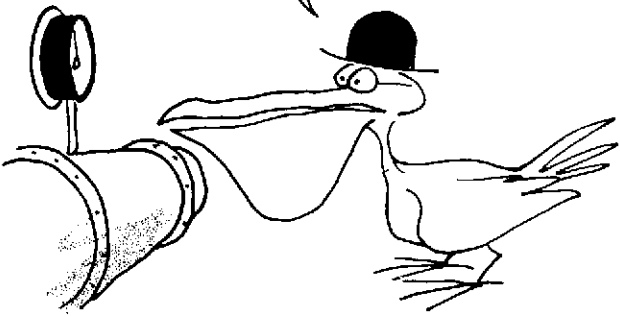
Oh, my footbath is getting cold!



It's normal, the current is going haywire in the PRODUCTION COST line

SOCIAL CHARGES

Look you lot, the revs are dropping and the pressure is falling



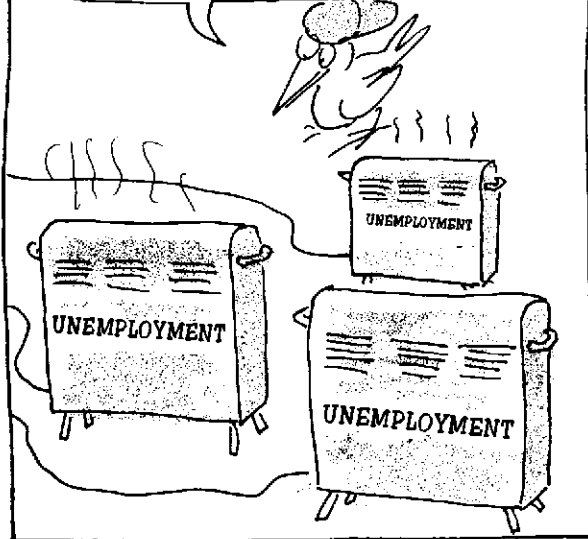
what's happening ?



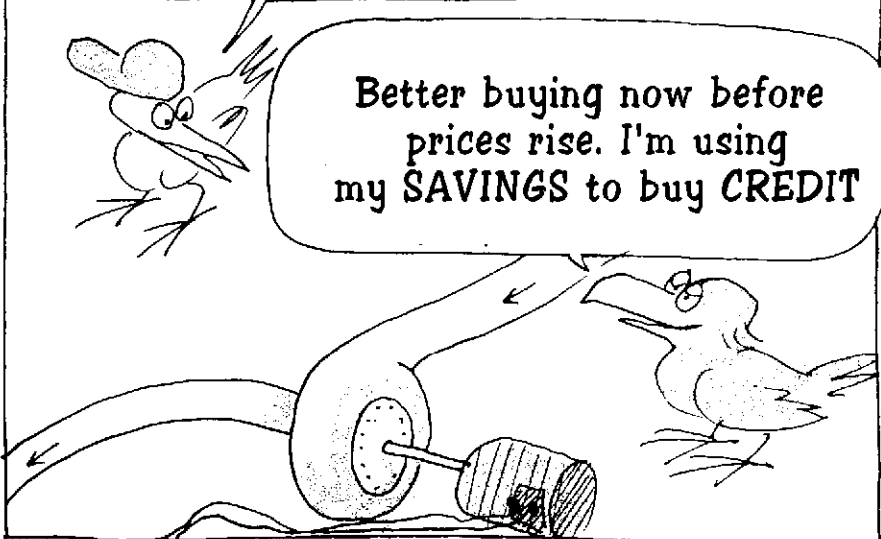
Lollimaker has closed the non-profitable production lines



UNEMPLOYMENT is rising

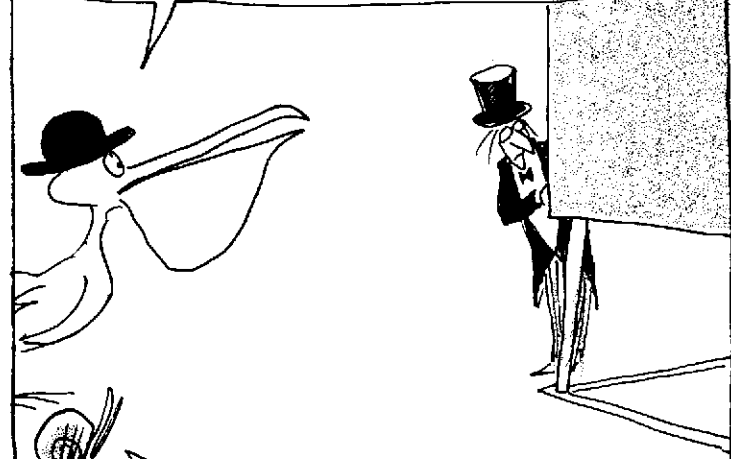


What are you doing?



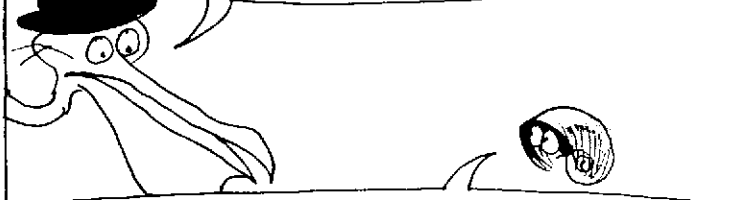
Better buying now before prices rise. I'm using my SAVINGS to buy CREDIT

And what's Lollimaker doing?



I reckon he's putting a bit of air in his tank (INFLATION BY CREDIT) behind our backs.

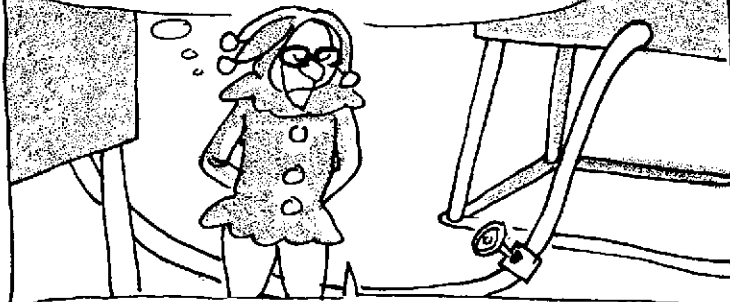
Do you mean that Lollimaker is making...counterfeit money?



No, not really...but the BANKING SYSTEM, all these papers, these credit engagements..all that finishes by looking very like money and if one day we emptied Lollimaker's tank, I'm sure we'd get loads of surprises.

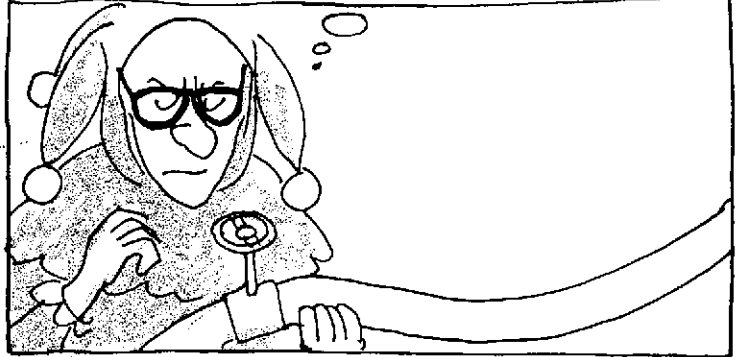


The use of CREDIT and the loss of CONFIDENCE, have set CONSUMPTION racing and prices SKY HIGH

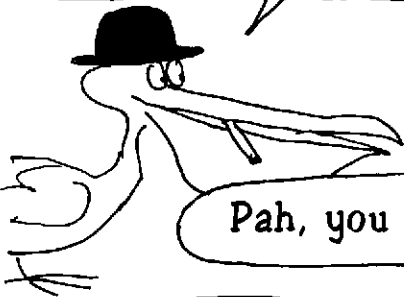


We've got to stop this overuse of credit.

Lollimaker lends too much LOLLI to people. In fact, I lend him money!

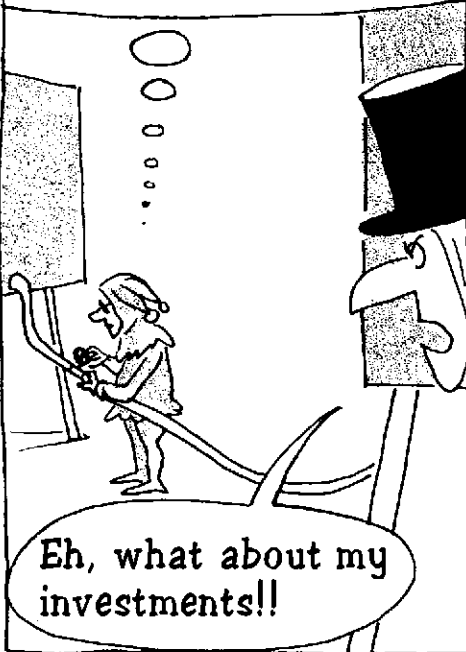


So, everybody lends to everybody?



Pah, you know there's an awful lot of wind in these loans.

I'm going to reduce his credit, that'll make him think twice before lending all over the place...



Eh, what about my investments!!

OK, well I've been playing around with this credit business but the government coffers are emptying at an alarming rate.

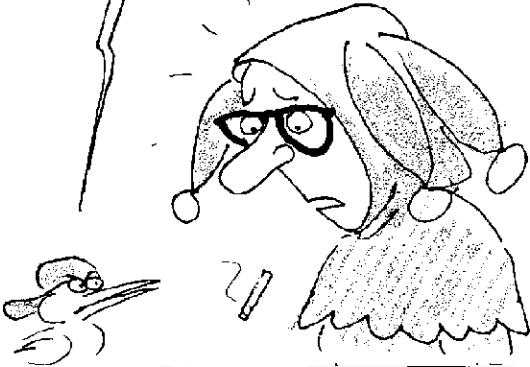


What can we do? Increase direct taxes?..indirect taxes?..tax on company profits?..



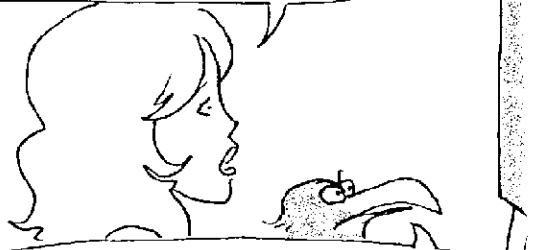
All taxes then...

We demand increases  
in output

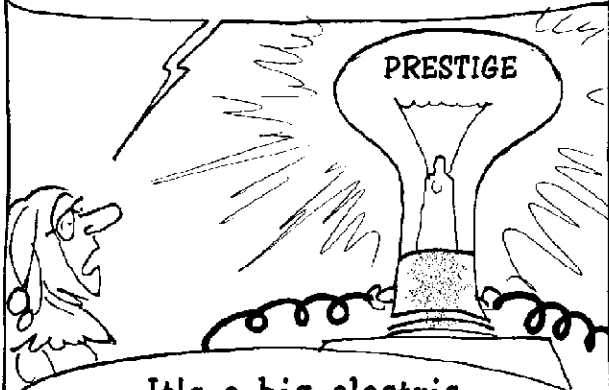


Mr SINISTER, the pressure is  
falling in the pipes, the  
BAROMETER is dropping too.

Hey, the tank is almost empty!

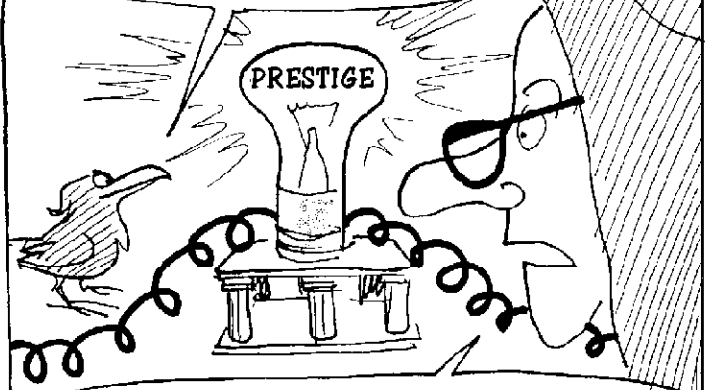


Who stuck up this  
peculiar thing?



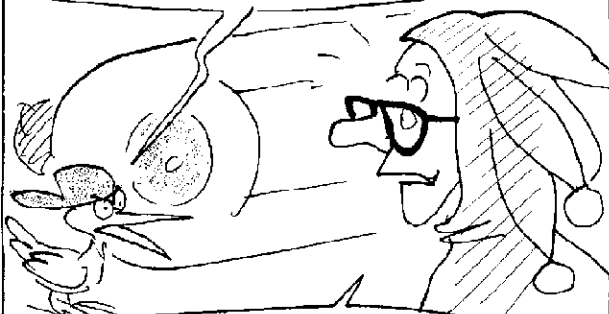
It's a big electric  
bulb, fed by the  
government coffers.

That way we can see  
it from miles away.



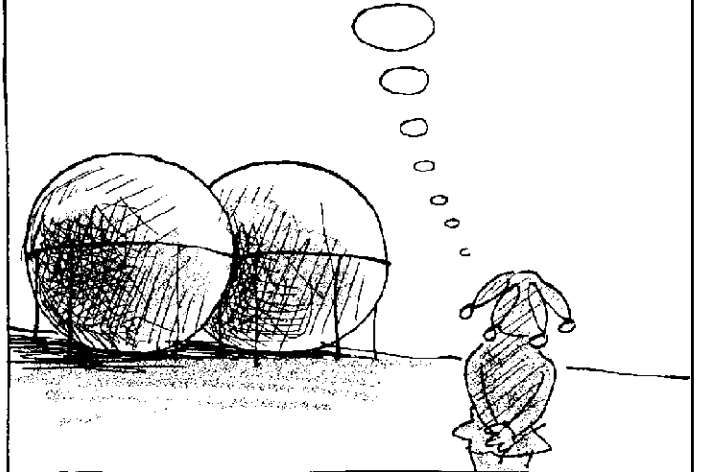
What!? Turn all that off  
immediately if not we'll be shot!

Increase the flow if  
not we'll stop working.



Yes, yes...straight away.

Hmm, there's only one  
solution left





What's the SINISTER doing?

He's hooking up these big tanks into the LOLLI circuit

and refeeding the government coffers.

These reserves are enormous, they're lifesavers. Its very reassuring. But whats in them?

I haven't the slightest idea.

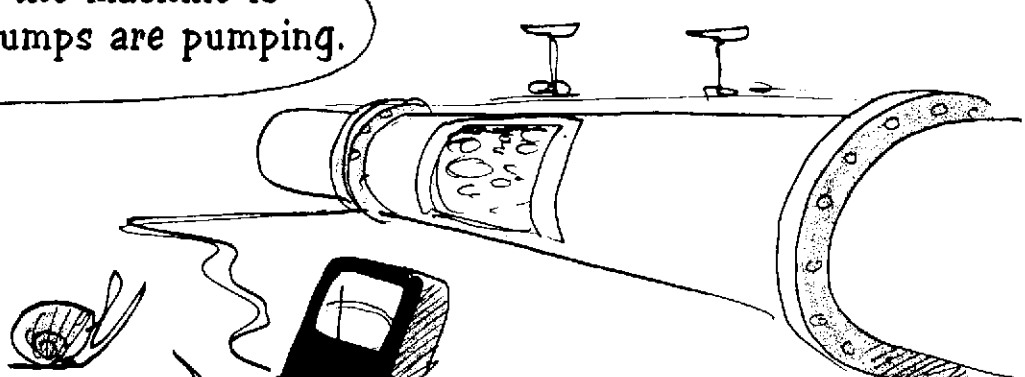
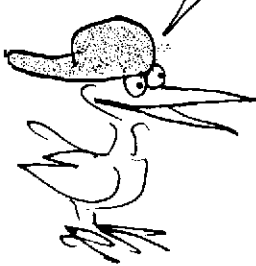
Ah, the flow is increasing at last. About time too.

WRROAWRRR

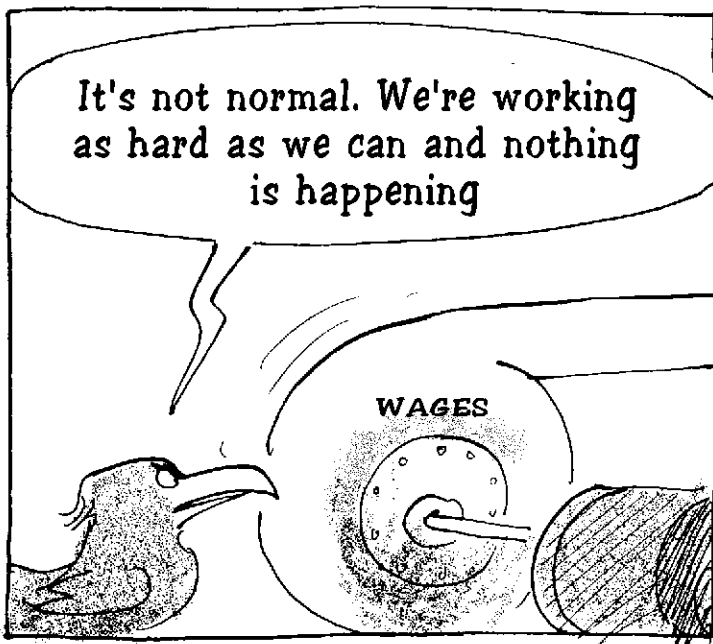
Good intensity. The consumption pump is working at last.

Hey! Careful, look at these prices!!

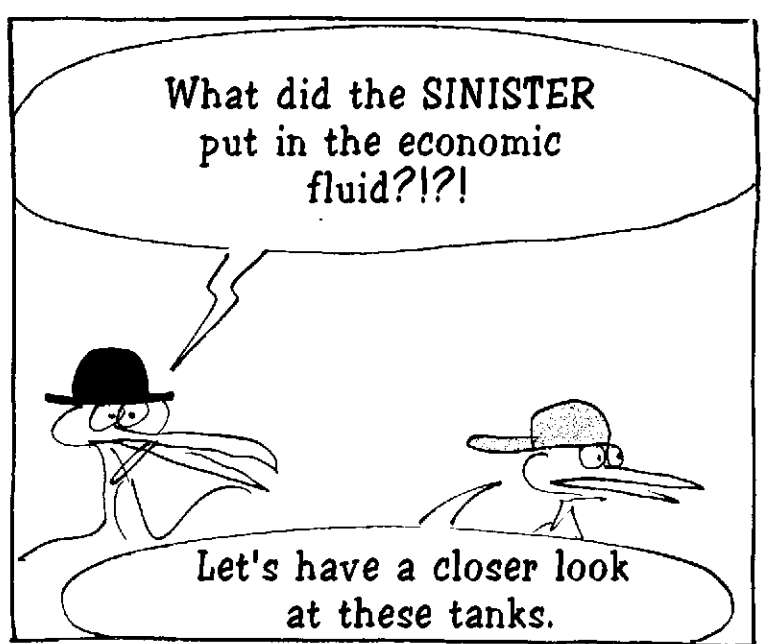
Still, it doesn't matter, the machine is working better, and the pumps are pumping.



Yes but look, intensity is dropping everywhere.

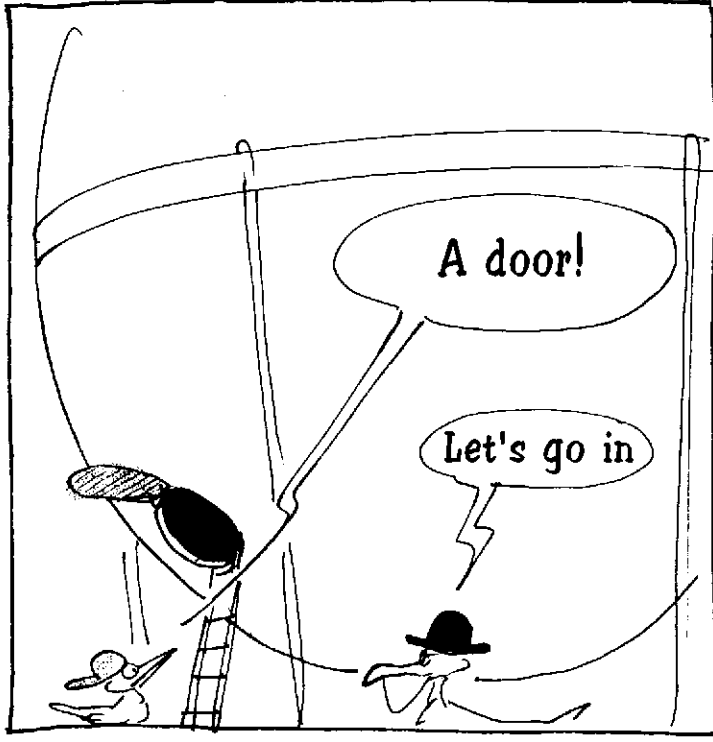


It's not normal. We're working as hard as we can and nothing is happening



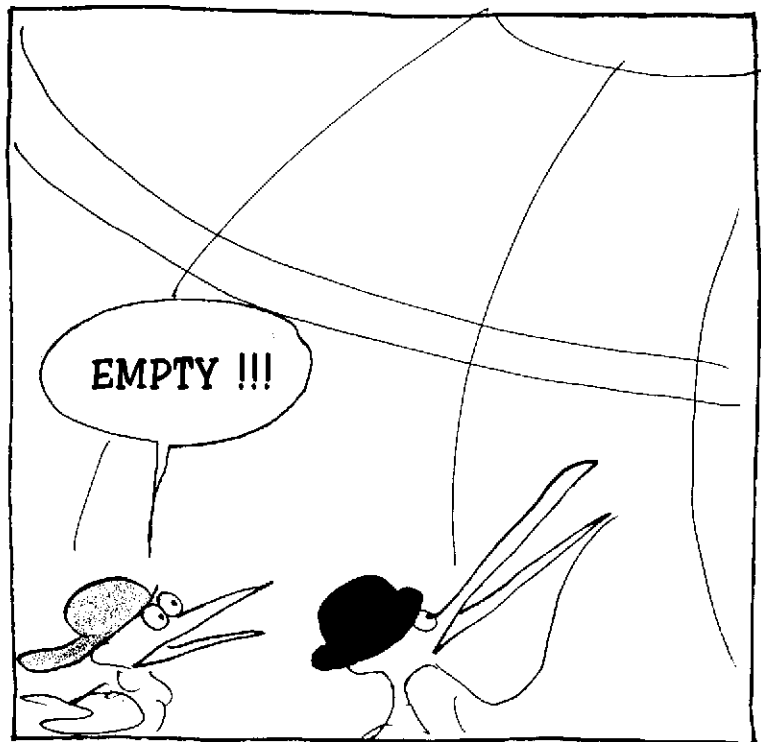
What did the SINISTER put in the economic fluid?!?!

Let's have a closer look at these tanks.



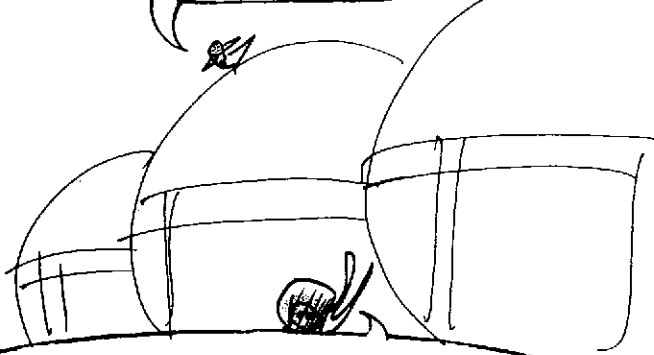
A door!

Let's go in



EMPTY !!!

You mean to say that these tanks have **ALREADY** been emptied?



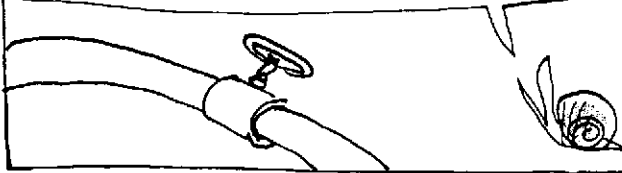
No, they've **ALWAYS BEEN EMPTY!**

A sort of **ECONOMIC VACUUM?**

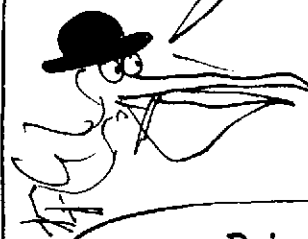


Pure, unadulterated **NOTHING?**

When things are going badly, all **SINISTERS** are the same. They inject an enormous quantity of **WIND** into the circuits. At the beginning that helps the **LOLLI**, **STIMULATES** it.



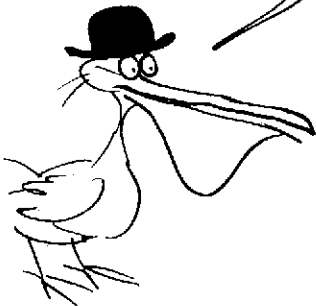
But all that homogenises with the result that **LOLLI** loses density.



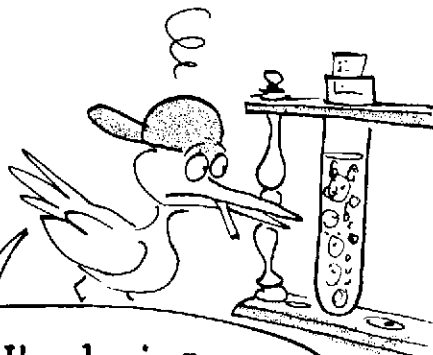
Prices rise.



**SAVINGS** depreciate.

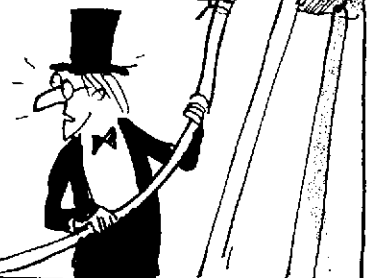


Blow, I'm losing my savings too.

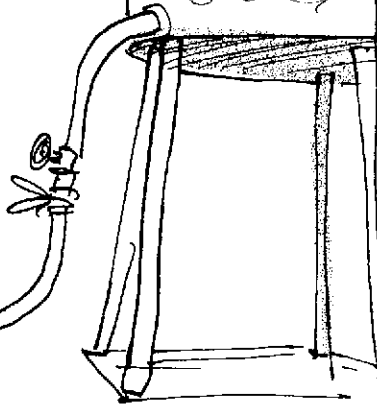


**CAPITAL** too

**LOLLIMAKER!**



A flight of capital!  
Huh, the villain!!!



We've arrived just in time!..



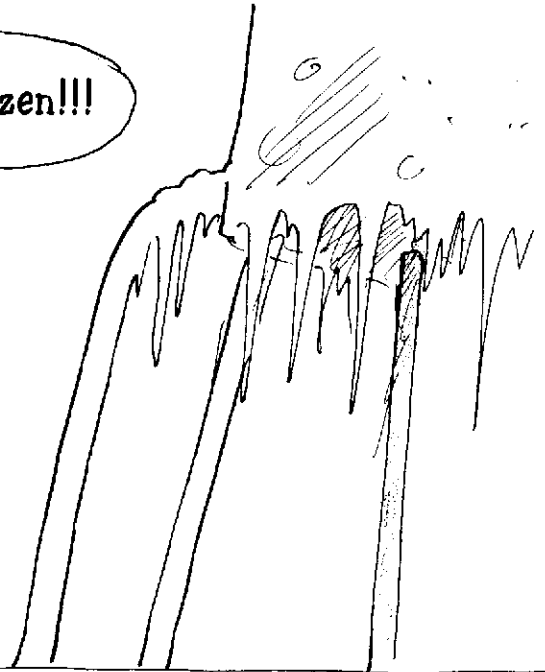
Lollimaker, I need  
your capital

don't be  
childish !

where's he gone?



Eh? Frozen!!!



He's left a note...

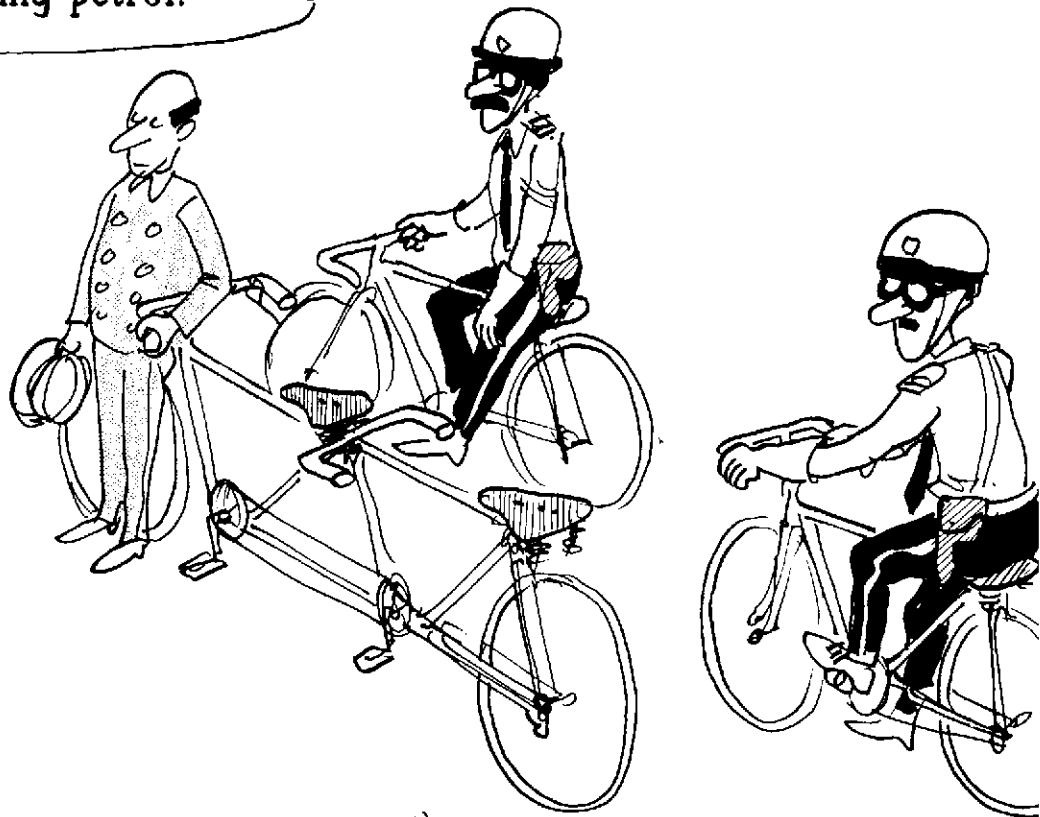
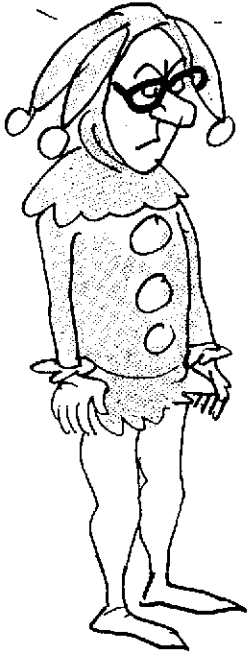


Block wages, reduce taxes on  
company profits and social charges,  
and give us subsidies to invest

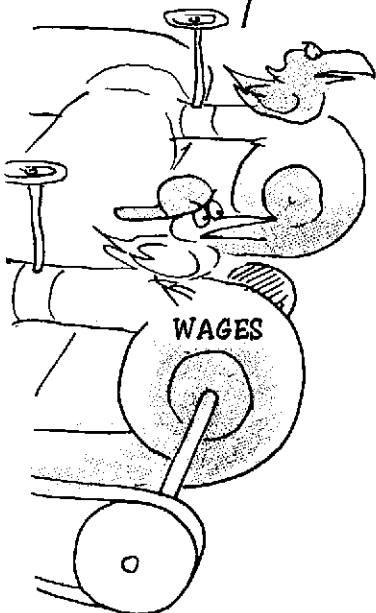
Mr Lollimaker

But **BUYING POWER** will drop, people will complain  
and the consumption pump will slow down even further.

Let's start by economising  
some of this blinking petrol!



LOLLI isn't worth anything  
anymore. Increase the flow!!



We told you so!

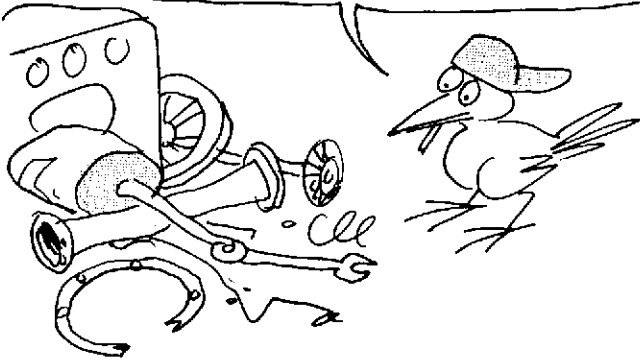
Madness!

certain ruin!..

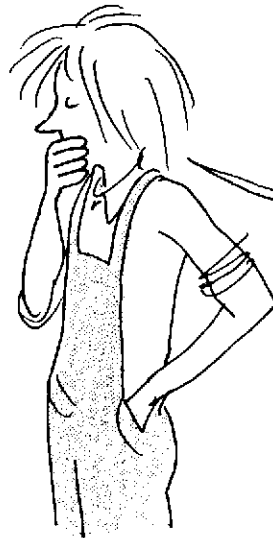
In fact when  
I was Sinister,  
it wasn't any  
worse...

# EPILOGUE

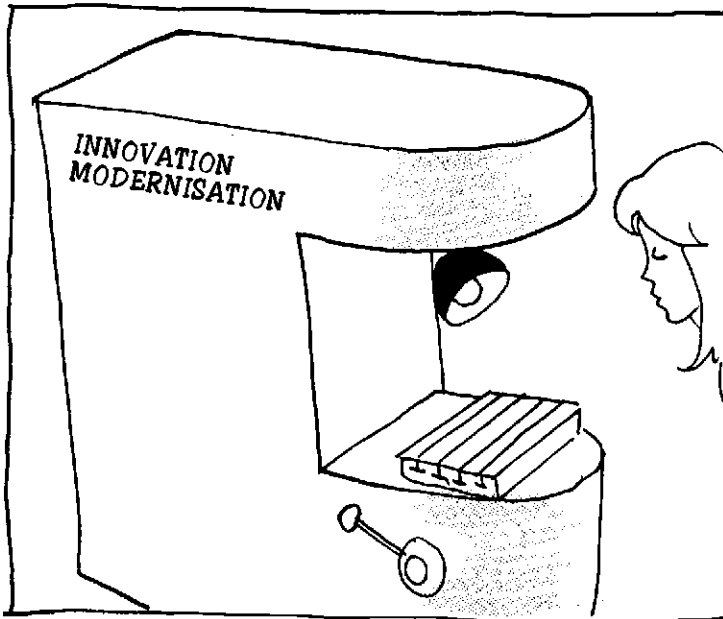
Look, another production unit that has been dismantled.



Well have to make another one, lot of others...



MINISTER...

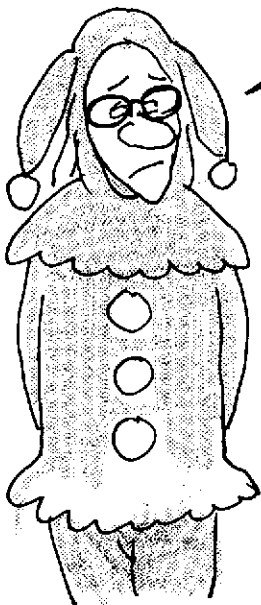


What if I created another ministry?..or a Secretary of State?..



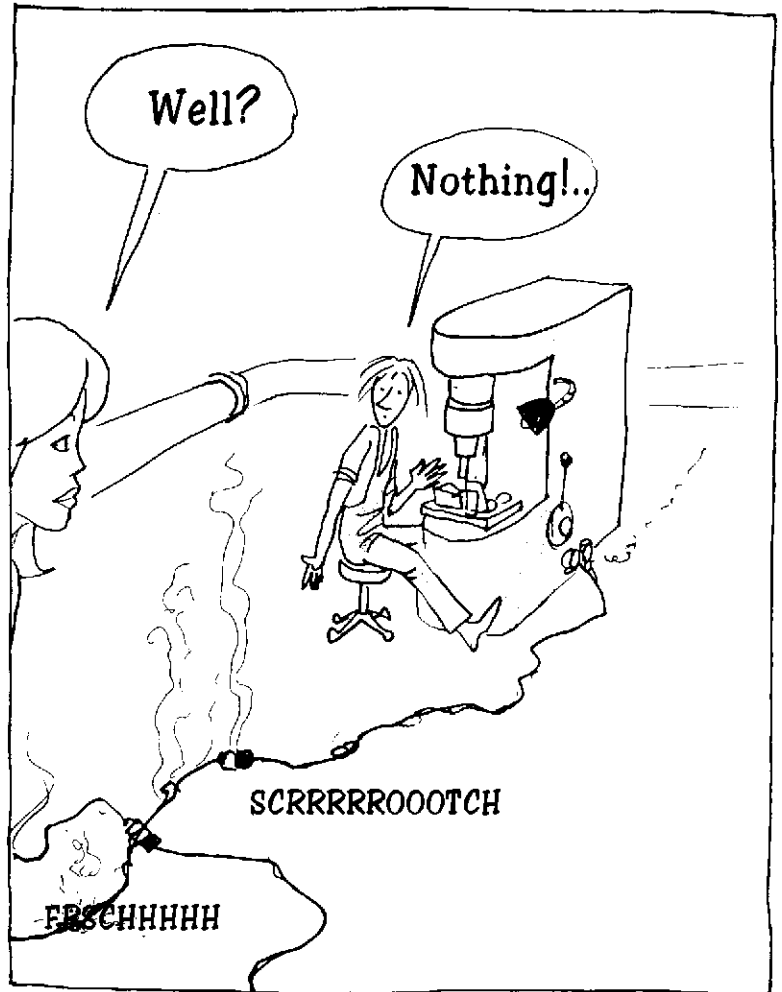
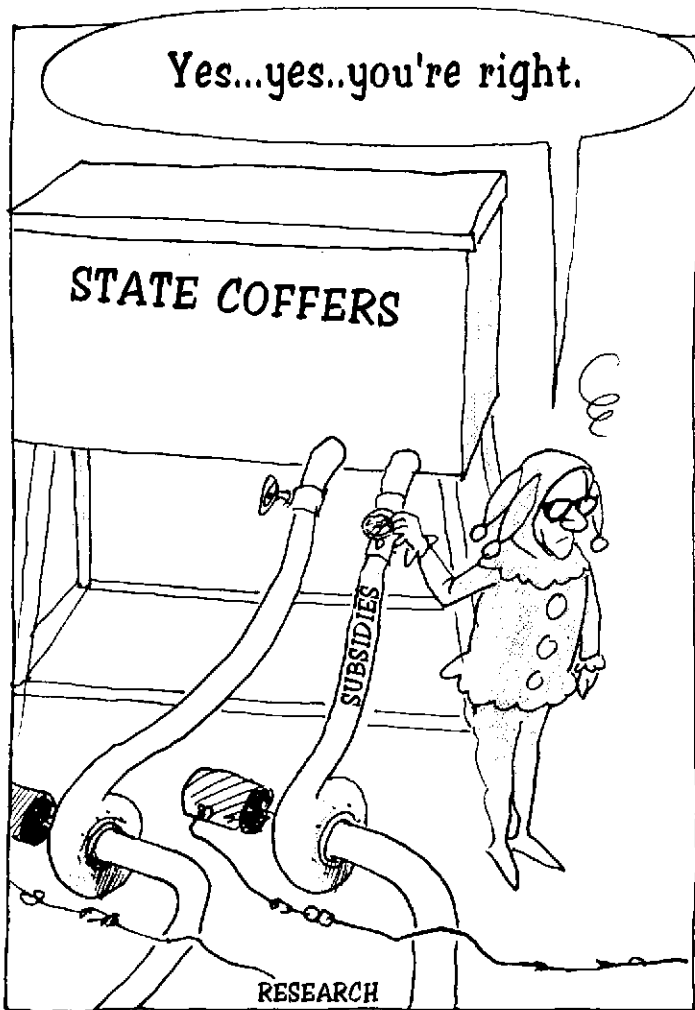
Yes?

Minister, the only solution is a leap forward. We have to **INNOVATE**, create new and modern production tools.

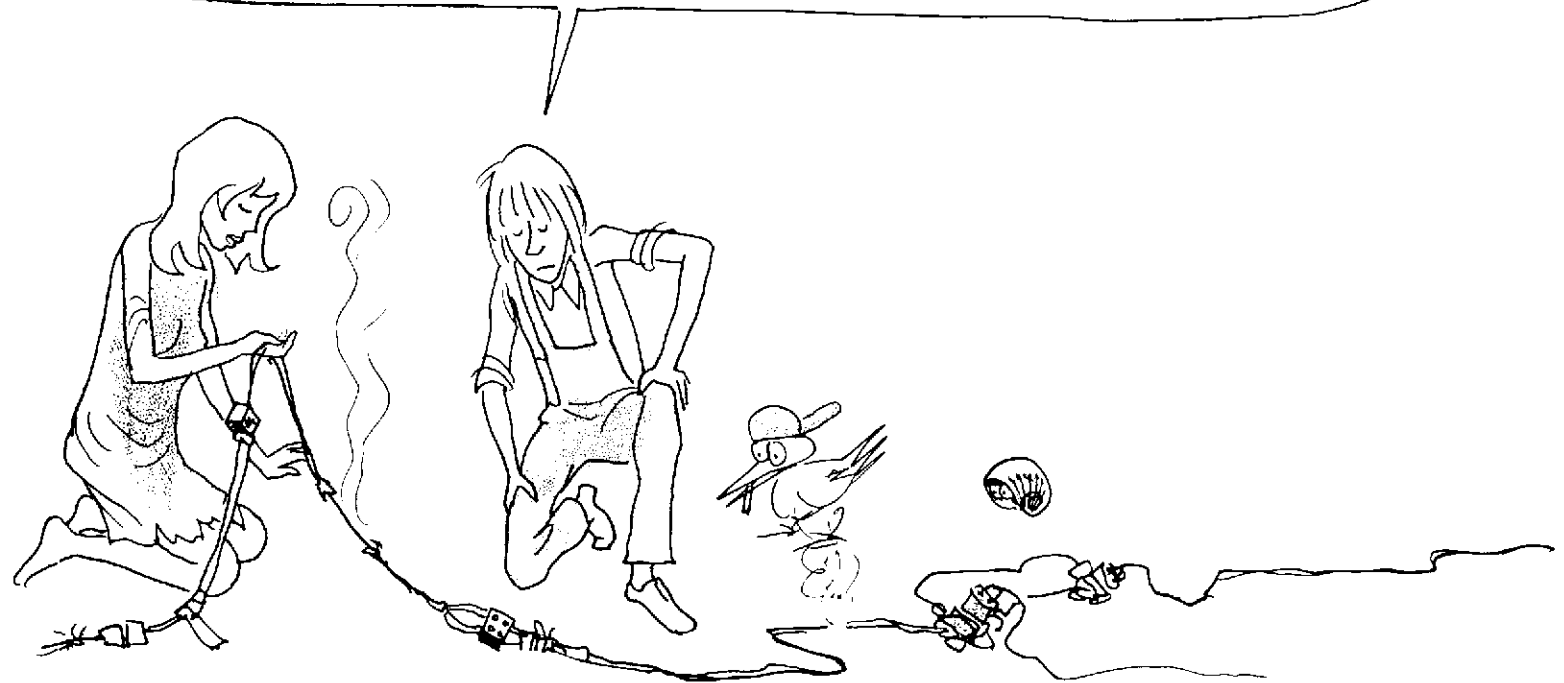


We have to use our **IMAGINATION**.





The problem with this country is leaks on the lines.



**THE END**