

ISSUE 58 WINTER-JANUARY 1998  
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# Knotting Matters

Newsletter of the



INTERNATIONAL  
GUILD OF KNOT TYERS

# Guild Supplies

## Price List 1997

Item	Price
<b>Knot Charts</b>	
Full set of 100 charts	£10.00
Individual charts	£0.20
<b>Rubber Stamp</b>	
IGKT - Member, with logo (excludes stamp pad)	£4.00
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parchment-like membership scroll signed by the President and Hon Sec for mounting and hanging	

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PS Don't forget to allow for Postage

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**Supplies Secretary: - Sylvia Harding**  
**16 Egles Grove, Uckfield, TN22 2BY - 01825 760425**

# KNOTTING MATTERS

THE QUARTERLY NEWSLETTER OF  
THE INTERNATIONAL GUILD OF KNOT TYERS  
ISSUE NO 58 WINTER - JANUARY 1998

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Seniors	£16	
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prefer a covenanted subscription.

Advertising rates:Members Non Members

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Quarter page	£10	£15

For inclusion in one issue only

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<b>KM59</b>	<b>07 MARCH 1998</b>
<b>KM60</b>	<b>07 JUNE 1998</b>
<b>KM61</b>	<b>07 SEPT 1998</b>
<b>KM62</b>	<b>22 NOV 1998</b>

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# KNOTTING MATTERS

## CONTENTS

03	Editors Bytes and Pieces	Lonnie Boggs
04	Secretary's Blotter	Nigel Harding
07	Catalogue of members books	Frank Brown
	North West Branch meeting	Dave Walker
08	Dolly Knot	Percy Blandford
09	Franciscan Monks Knots	Jim Doyle
10	Millennium inventory of collections and members profile	Dan Cashin
12	Thief Knot	T.L. Scanlon
	New Knots?	R.E. Miles
13		Owen Nutall
14		Ian Bates
	Texel Anchor	Ettrick Thomson
	Sheet Bend	Reg White
15	Knot Tying Program	Torbj. Sundblom
	Review of "KNOTS"	Frank Cook
17	Strange But True	Stuart Grainger
19	New Single Strand Chain Sennit	John Halifax
20	Compiled list of supplies	John Halifax
21	West Country Whipping	Dave Walker
23	Bell Rope for USS Constitution	Paul Evans
25	Un-named Bend-A & Nilsen Bend	James Doyle
27	North American Branch at New Bedford	John Chesterfield
28	Pyramid Loop?	Robert Wolfe
31	IGKT Half AGM at LIVERPOOL	Robert Wolfe
37	Drawing Knots with Microsoft Draw	Jonathan Farrar
40	KNOTPLOT (WEBSITE)	Frank Brown
45	Members Profile; Brian Glennon	Robert Wolfe
46	Book Review: Celtic Knotwork Designs by Sheila Sturrock	Brian Glennon
		Geoffrey Budworth
47	The Sailors Traditional Ditty Bag	Louie Bartos
52	Knot Puzzle	Greater Victoria Region of Scouts, Canada
53	WHY KNOT?	Mariann Palmborg
55	How we came to Baquia	Peter 'FREDAG'
59	Accident Report	Sent in by Dan Cashin

## EDITORS BYTES AND PIECES

What can we do? There are more and more excellent branch Newsletters with so much tremendous copy that we don't know what to do about repeating it in KM? We have enjoyed the New Zealand Newsletters, so much that I was really looking forward to the new Branches sending in their stuff. But at what point do we stop reprinting the, admittedly very good, copy which is even now swelling KM to 60 pages. We could almost do a whole KM of just excerpts from all the excellent branch newsletters now. Will the rest of the membership want to be left out of what is happening in New Zealand, North America, the West Country and indeed in Sweden and Denmark? Should we print only a percentage of pages or a maximum number, to do with branch news and the rest is all new news from letters directly to KM?

It has been suggested that we should keep all long or heavy articles and letters back, to be issued in a separate publication,

KM+PLUS say, at intervals determined by the volume of material. This would stop articles from being broken up in several issues and causing the readers to lose the thread of the argument or interest in the subject before the final statements are made. I have been working, slowly, on a summary publication on the first ten years of KM. It started as a recap of articles and associated letters but is growing as I look at it, into a sectoring exercise of putting subjects together. But it may be a while before it is ready as it is only an interest, not something with a deadline.

We are thrilled, truly, that you all send in so much material, especially the branch newsletters, but we now need to review what we put in, what we leave out and what we put into some other format or publication. We have excluded only confusing or unreadable material and used anything of interest even in a lateral way to knot tyers.

Please write, not necessarily for publication, to the Editors, to help us decide where we are going with KM.

## Notes From The Secretary's Blotter

Let me start by thanking all those of you who sent Christmas and New Year greetings to us. They were greatly appreciated, and we have been reluctant to take them down, now that the season is over.

Now that Lonnie and Margaret have rekindled your enthusiasm to write articles and letters for Knotting Matters there is less space available for me to fill, hence I shall attempt to be brief, not something that I am very good at.

Firstly I must put out a general reminder, that, as from 1 January the annual subscription rates have been increased to the following levels, Junior members - £5, Adult members - £16, and Family members £20. The Group membership fee remains unchanged at £10. We hope that we shall be able to peg fees at this level for some time to come, the last increase was seven years ago. Finally, for those overseas members who pay by cheque, don't forget to allow for the currency conversion charges, for example £16 equates to about \$27, but we would need a cheque for \$30 to cover these charges.

Past editions of Knotting Matters have been made available since KM2 was published, however, it has now become impractical to perpetuate this service. Where individuals have requested a full set, this involves nearly two reams of paper and almost ten man hours of photocopying, assembling, stapling, packaging, and posting. Unless circumstances change, in future it is proposed that only those KMs which we have in stock will be available for purchase. This decision has been taken reluctantly, however, consideration is being given to the publication of a 'Best of KM' at some time in the future, to provide new members with access to some of the previously printed 'gems'

In the last Blotter I said that Geoffrey Budworth's 'The Knot Book' was being revised and reprinted. This has now been done, and I now have some copies in stock. As expected the price has increased to £3.99, which I still believe to be good value.

Whilst on the subject of books, One of our Italian members, Giovanni Marco Sassu has published a book called *Il Mondo Dei Nodi*. Naturally, this has been written in Italian, which makes my understanding of it a little difficult, however it is clearly illustrated, such that even I should be able to tie most of the knots. The book starts with a glossary of terms, and has chapters on the construction and handling of cords and rope. The book continues by classifying the various types of knots, and then giving examples and instructions for a number of knots in each classification. There are 87 pages containing about 150 illustrations some of which are described as 'new knots', - a statement which is always guaranteed to stimulate discussion amongst the membership. (Price - Lire 15,000)

My apologies to Giovanni for not having mentioned his book earlier in the year, but it has only just come to the surface since my move. I do believe that I have now found everything I had lost, including many things which I did not even know were lost.

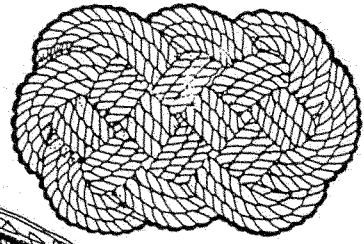
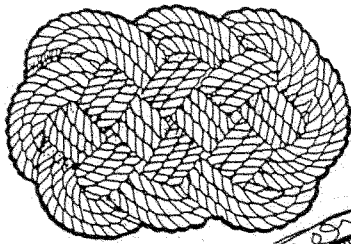
Those of you who have given displays or put on exhibitions in the open air may be interested to know that the Guild owns a Market Stall and an all weather display stand. The market stall is held in the Oxford area, whilst the display stand is in the Leeds area. It will be necessary for the user to arrange collection and return (ring me for further information).

*Are your details correct?* I am about to embark upon the 1998/9 edition of the Membership Handbook, and would like to avoid publishing too many errors. Please let me know either if the address on the envelope this KM arrived in is wrong, or if you have spotted an error in the last edition of the handbook

Ken Yalden has been invited to put on a display for the Ganges Boys Association, at their April meeting. If there are any Ganges Boys who would like to join him, please give him a ring for further details

Finally, I am starting to build up a directory of potential venues for meetings. If you know of any do let me have a few details, including contact address, and possible cost.

Best wishes - Nigel - (looking forward to seeing you at Portsmouth)



# **KNOT TYERS WANTED!**

**AT THE 16th AGM OF THE I G K T**

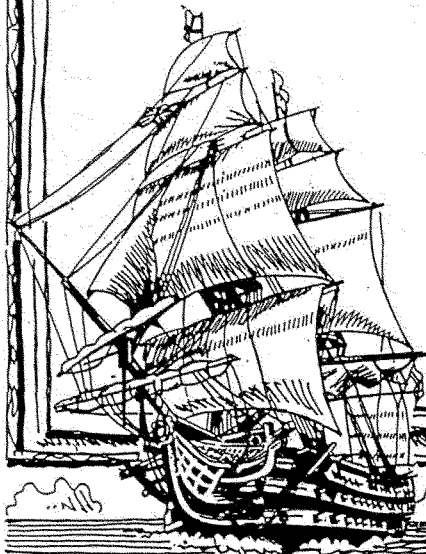
**ON**

**MAY 8-9-10 1998**

**IN**

**PORTSMOUTH NAVAL HERITAGE CENTRE**

**Our chance to involve  
Portsmouth and the  
maritime world in the  
I G K T**





## FROM OUR POST BAG

From: Frank Brown, Australia.

Some of the ideas expressed in my article in KM30, 1990 on the production of a comprehensive catalogue of knots, were a little naive, but I still think the concept was sound. Since then I have learned a bit about the availability of some very impressive technology. The easy access to digital cameras, scanners, cheap drafting programs make the proposed task less daunting than a few short years ago. Of course it will need some bright boy or girl to get the material together in the electronic medium. The knot material on the Net is interesting, but a lot more could be done.

Here is the Members Profile you asked for.

Originally a Pom, but fairly well integrated onto local scene after 50 years. Interest in rope work grew from association with sailing, caving, search and rescue, and possibly inherited from seafaring, boat building ancestors. Nearly 30 years as a volunteer instructor with State Emergency Service, having a reputation as a rope and knot

man i.e. obsessive bore on the subject. Occasionally consulted for forensic work, i.e. known to the Police.

Joined the Guild in 1988, having brief but enjoyable correspondence with several members. Good to learn I was not the only knot-case around.

Presently helping to rig a brigantine, the Windeward Bound (correct spelling), after about 5 years of Saturday afternoons helping to build it.

Employed as environmental scientist by local electricity supplier. Known to go slightly berserk when finding a tangled rope on a dirty floor of the stores during an audit. Introduced parbuckle as suitable alternative to dropping oil drums off trucks.

Ambition is to create a comprehensive catalogue of knots. Idea was conceived while sitting in a hut in SW wilderness waiting for the rain to stop.



From: Dave Walker, Chester.

The North-West Branch held their November meeting at the Ellesmere Port Canal Boat Museum on Sunday 8th of Nov.

The meeting was attended by Bob Mitchell, David Bennett, John Neapy, Ron Long, John Elliot, M. Grisenthwaite, Alex Carson, V.R. Farrer and myself Dave Walker.

Unfortunately the Museum was very quiet but the lack of the public enabled us to get on with some knotting, the change of venue also enabled us to have a practical knotting meeting, spread over 5 hours. We will be holding more of our meetings there in the future.

By the way, what did we tie?  
Ron Long; Half-Hitched Fenders

Dave Walker; Side Fenders  
Alex Carson; Covered Spheres  
John Heapy; Rope Ladders  
Bob Mitchell; Various Fenders  
Dave Bennet; Made obscure shapes with crown knots.  
Maurice Grisenthwaite; Rope Magic.

What a mix!!



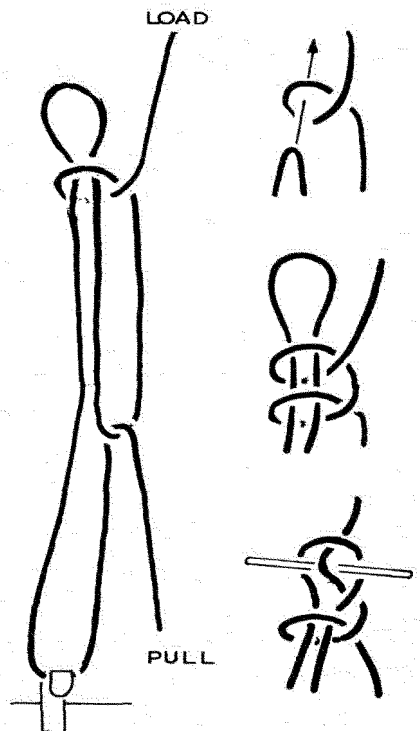
From: Ex-President Percy Blandford, Warwickshire, England.

Dr. Ian Crabbe asks for details of the Dolly knot (KM56). It seems to have many names. I have always known it as a

Waggoner's Hitch and have used it over a great many years for lashing boats on trailers.

It is a means of using the rope itself to make a tackle that gives a theoretical mechanical advantage of 2 to 1, but friction reduces that. Braided synthetic rope produces less friction than did 3-strand natural fibre rope.

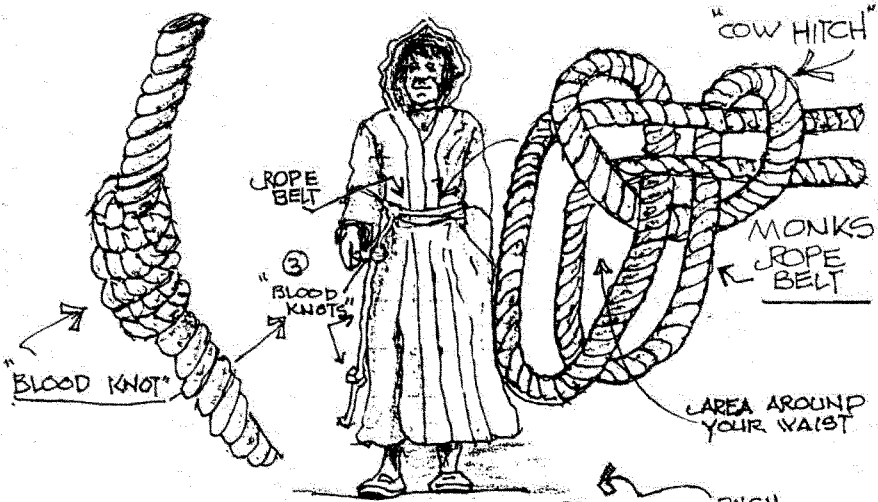
Secure the rope at one side and throw it over the load and gather it up as if starting to make a sheepshank a short distance above the attachment point.



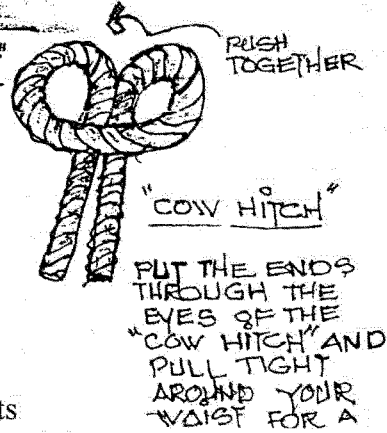
Put a half-hitch over the top loop, as in a sheepshank. At the lower loop take the working end to the hook or ring and back through the loop. Haul down and secure it.

That was adequate with natural fibre rope, but there is a risk of the top loop twisting out of

the hitch with some synthetics. If you make the loop extend well above the half-hitch it should be safe, but I have also put a piece of wood across or put on a second half-hitch to form a clove hitch.



- ③ BLOOD KNOTS REPRESENT THE FOLLOWING AS THE VOWS HE HAS TAKEN IN THE MONKS ORDER.
- OBEDIENCE
  - POVERTY
  - CHASTITY



From; Jim Doyle, Salem, Mass, USA.

Here is some material on a couple of knots (Cow Hitch and Blood Knot) used by the 'Franciscan Monks', an order of St. Francis of Assisi..

From; Dan Cashin, Rigger Instructor (Industrial), Pennsylvania, USA.

Enclosed is a little list I've assembled for possible use as a Millennium project. A list of as many books and pamphlets dealing with knotting and associated skills that I could find. As a project for the Millennium I'd like to suggest we all take inventory of our collections and send this information to the Guild. What better contribution to the next age than a source of all the material dealing with our hobby? This task can be one that all members can be a part of. The project of refurbishing the knot sculpture is a fine idea but one that can't be done by all members, while a list can be simple but valuable addition to the foundation knowledge we are assembling by being members of the Guild.

The list I assembled took a few hours looking in the back of the 40 odd books I have in my collection. Ashley's, Day's and Knotting Matters were the main sources. I'm sure there are others and I'd love to hear about them. and would be glad to help others in the Guild if they need

information on or about the ones I have. I've also enclosed a disk with this information on it typed in Word For Windows format if that is any help. *[Ed: List and/or disk available to SAE and formatted disk received]*

A little about myself as you were interested. I'm a Rigger Instructor (Industrial) for a crane rental company (AmQuip) in the Philadelphia, Pa, USA area. We teach rigging safety to various large industrial clients. I started out as a Rigger Apprentice at the now defunct Philadelphia Navy Yard in 1966. Graduated to Journeyman Rigger in 1970 and moved up to Rigger Instructor around 1980. I retired in 1995 and shifted to the "Private Sector" ( or is it Pirate Sector?) where I still teach the same material to ground based folks. The need for good, reliable knots is as important today as ever. We did one class at an electronic company where knots were used to move a high-tech millstone used to make computer chips. Talk about going around in circles! I first heard about the Guild in the back of Geoffrey Budworth's "The Knot Book" and

further had my interest increased by the great article about Des Pawson in "Country Living" (August 1993) (As a sign of how small the world really is, the next article in that issue is about Irish Traditional Dancing and Connie Ryan who I met at the Philadelphia Ceili Group's Fest. Two -for - one issue there for me.)

My real interest in knotting is with the practical uses of rope to move heavy objects. The older the job the more interesting it is to me. I've accumulated a small library of books dealing with this subject, the artillery manuals from the American Civil War are a real gold mine for this subject. There are quite a few good pictures in nautical history books, you just have to look in the back of the old paintings to see real ancient technology at work. A hands-on project right now is the building of 1/3 scale gins and associated equipment used to mount siege guns in seacoast fortifications. Also I'm trying to find detailed plans for a "Prolonge" and a "Man-harness".

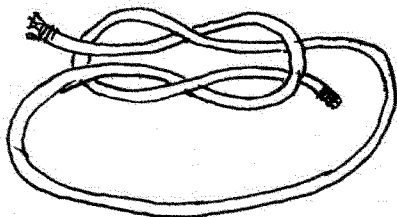
In my area there is quite a bit of knotting going on. Right

now, down in Wilmington, Delaware, Stephen Johnson is putting the finishing touches on the Kalmar Nyckel, a 300+ ton reproduction tall ship. I visited Stephen's rigging loft a short while ago and was EXTREMELY IMPRESSED with the quality of work he and his helpers/volunteers are putting together. If anyone is in the area they MUST visit the ship to see a real live working tall ship rigging loft in operation! Stephen's address is 1124 East Seventh Street, Wilmington, Delaware, 19801, USA. His phone is 1-302-429-7447. In October they will be starting the task of rigging the ship and volunteers are welcome. Also not far from my home is a seafood restaurant done up with a lot of quality rope/fancy work. It was done by the owner's father who is now back at sea. The place is called "Bobby's" and it is in Westtown, Pa. on State Route 3. (West Chester Pike) a few miles west of the intersection of Rts 3 and 252 on the map. It's in a good neighbourhood and is fairly classy. Also of interest to folks who make it to Philadelphia is a little nautical book

store called "The Pilothouse". They have quite a few knotting books on the shelf and only recently heard of the Guild! The owner lived on a sailboat anchored on the Delaware River for sometime. The store is on Delaware Ave just south of the historical area. I'll end here with thanks and a wish of untangled lines for you and yours!



*from T L Scanlon, Uxbridge UK*



As a new member I would not know if you have seen the above knot, if you have please disregard it.

At a glance this looks like a reef knot, but used to be called a thief knot by sailors who tied their kitbags up using the knot, so they could tell if their bag had been tampered with. As an unknowing sneak thief would close up the bag with a reef knot.



Some of *your views on new knots.....*

*from R E Miles, Australia*

I believe the discovery and publication of new knots should be an important aspect of IGKT activity, and that the logical place for such publication is Knotting Matters. Here are my ideas on how this should be done:

1. Member discovers what s/he believes it to be a new and valuable knot.
2. S/he checks out source references to try to ascertain whether it is original (i.e. Ashley, Budworth, my book of bends, back numbers of KM etc).
3. If satisfied it's not in any of these, an article is submitted to the Editor.
4. The Editor should first send copies of the article to one or more 'originality referees', i.e. members with a good knowledge of that particular type of knot, simply to ask whether that knot has been published before anywhere. This shouldn't take any longer than a week!
5. If it has been published before, then article is returned

to the author, who may of course wish to revise and re-submit in some form.

6. If knot is evidently new, then Editor considers the article on its merits, just as for any other type of article.
7. If approved by the Editor, it is published in KM, with a postscript 'Originality of ... checked by...'
8. If rejected by the Editor, then the member should have the right to establish precedence for his/her knot, by means of a paid advertisement in KM (at £10 a page!).

I speak with a little feeling, having detected three re-discoveries of bends in recent KM issues. The first two of these are covered by the references KM30/25, KM47/8, KM54/33, KM55/7. The third occurs only four pages before the 'New Knot?' discussion in KM57! viz the 'Nilsen Bend' on p53 is none other than the Zeppelin Bend (see Budworth's or my books).

*Ed: We think we have enough to do without sending articles for verification, we do this through the pages of KM, and surely it is better to have 10*

*'new' knots disclaimed as something else rather than overlook a genuine new knot, in any case these letters generate and stimulate members interest, several who would not normally write to KM. (thanks for eucalyptus leaf)*



*from Owen Nutall, Huddersfield, UK*

In the article on new knots by Karl Wilhelm KM57. The Bend (Nilsen Bend) Fig C is none other than the Zeppelin Bend or Rosendhal Bend used for mooring Airships by Charles Rosendhal, Airship Commander.

I would also like to compliment you on your approach to knotting in your articles. There is now an interactive response to what KM contains which is good for the Guild. If you can stir John Smith to put pen to paper (his articles were popular and are sadly missed) things can only get better. Get people involved and knotting matters benefits. (*Ed: As our remark to last letter, it is important to generate interest.*)



*from Ian Bates, Manchester, UK*

I suppose you have had a deluge of mail regarding the 'Nilsen Bend'. I am sure by now you have been told it's a Rosenthal Zeppelin Knot (re KM 57,53).

*Ed: yes please send in your article re organic chemistry and knotting.*



*from Ettrick Thomson, Suffolk, UK*

The 'Nilsen Bend' is unfortunately not new. It is the 'Zeppelin Knot', and has been re-discovered by at least three of us: Desmond Melville, myself and now Karl Nilsen. Geoffrey Budworth, in his knot book gives its history. It is listed in the contents among the New Knots as the 'Poor Mans Pride', the name that Desmond invented for it.

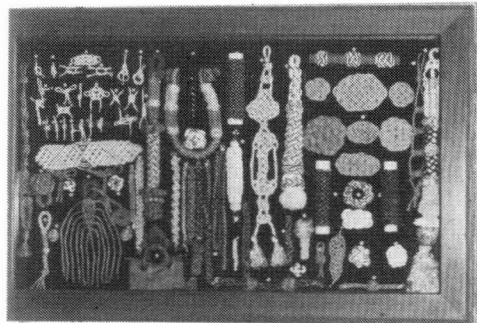


*from Reg White, Ceredigion, Wales*

I thought members might be interested in some of my work,



not all as I have most on display at places up and down the coast. Hope you like my version of the 'Texel Anchor', I use mine to



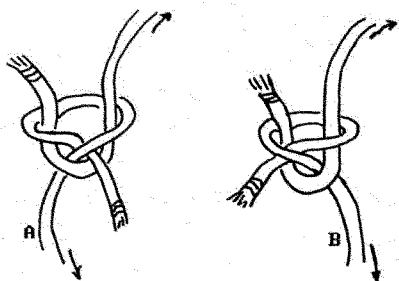
collect for the RNLI.

*Ed: Well done Reg a very good cause.*





*from Torbj. Sundblom, Mariehamn, Finland*



Can members tell me which of the above two Sheet Bends is correct please and why?



*from Frank Cook, Oregon, USA*

I have written two Windows based computer programs that illustrate through animation how to tie knots. They are quite simple to run, you just point and click. The programs are entitled 'Knots' and 'Fishing Knots'. Each knot in either program has front and back drawings of the completed and tightened knot plus the important animation. The user can either run through the animation automatically (with roughly a one second delay between drawings) or step forward and backward at leisure. Also included are a written description of the tying process, popular variations, if any and proper usage. In addi-

tion, each program contains a brief tutorial on knotting, knotting terminology, a diagram of parts of a rope and a list of knots to know. For those of you who teach knotting, all of the diagrams and instructions can be sent to your printer. Help on the program, and it is unlikely you will need any, is just a click away.

**Knots**, which is the more general of the two programs, covers a total of 37 knots, bends, hitches, fishing knots plus some miscellaneous knots that seem not to fall into any particular category. Included under (true) knots are the Overhand Knot, Figure 8 Knot, Reef (Square) Knot, Constrictor Knot, Surgeon's Knot, Bowline and Double Bowline. Under bends are the Sheet Bend, Double Sheet Bend, Fisherman's Knot, Sliding 8 Bend, Figure 8 Bend, Hunter's Bend, Poor Man's Pride and Carrick Bend. Hitches include the Half Hitch, Clove Hitch, Anchor Bend, Round Turn and 2 Half Hitches, Rolling Hitch, Net Line Knot, Lighterman's Hitch and Timber Hitch. For the fisherman are the (improved) Cinch Knot, Al

bright's Special, Blood Knot, Palomar Knot, Blood Dropper, King Sling, Surgeon's (Water) Knot, Snell (Whip) Knot and the versatile Uni-Knot. 'Knots' finishes under Miscellaneous with the Simple Noose, Sheepshank, Trucker's Knot, Taut Line Knot and Transom Knot.

The more specialised 'Fishing Knots', also contains some valuable boating and general knots. Categories are terminal tackle, line to line (bends), loops, snelling knots, boating knots and the ubiquitous miscellaneous. All in all, there are 33 knots.

'Knots' and 'Fishing Knots' run under Windows 3.1 or 95 and require 4 Meg of hard disk space. A mouse is recommended but not at all necessary. A set-up program takes care of the installation, icons, programme groups and all that. You do not have to be a computer guru to run either program. My next door neighbour's son runs it and he is only 7 years old.

If you would like to order a copy of either program, send a cheque or money order for \$15 US dollars (\$25 for both) +

\$3.50 for US shipping to Frank Cooke, PO Box 2066, Sisters, Oregon 97759 USA. Specify if you want 3.5" or 5.25" floppy.

I would like to thank Messrs Budworth and Grainger who introduced me to the IGKT and of which I am a recent member. Mr Grainger has been particularly helpful and supportive. I have plans to set a web site from which these programs can be downloaded, but that is in the future. If anyone would like to contact me, please write to the above address or e-mail me at IDFrank@aol.com.

*Ed: thanks Frank for our copies, they are excellent, even Margaret managed to master the Bowline, something I have not managed to teach her as yet. The programme is simplicity itself to install and to use. You are right, they are very simple, although your using a 7 year old as an example is maybe not good, as most 7 year olds manage computers better than their elders.*



## **KNOTS - v2.2 A Computer programme by Frank Cooke.**

The first version of "Knots" was sent to me by Geoffrey Budworth in the form of a 3.5" high-density computer disk, which he doesn't have the machinery to use. Geoffrey asked me to look at the programme and send my comments to the author, Frank Cooke, of Oregon, U.S.A.

I did as I was asked, and was glad that I did (not just because one doesn't refuse Geoffrey lightly!), because it proved to be genuinely worthwhile. It was a very simple programme to use, which is just as well as I am no computer expert, and I soon found my way around it. After installing from the disk, and starting the programme, one finds the normal kind of window, with a menu along the top of the screen, a title in the middle and a miniature window at the bottom left corner, in which a tiny animated Figure of Eight Knot constantly ties itself. The top menu reads from left to right:- File, Knots, Bends, Hitches, Fishing, Misc, Info, Help. The first and last provide what anyone familiar with computers would expect, including a printing facility. The Info column offers four choices, Knotting, Terminology, Parts of a Rope and Knots to Know. The Knotting option provides information about knots, their history, definition, characteristics and comparisons. The Terminology option defines terms, Parts of a Rope provides a simple diagram also defining terms and Knots to Know provides a list of knots which the author says everyone should know. I am sure that members will have their own views about this list, but it rather depends what you expect to need from your knots.

Clicking on one of the five remaining menu heads, Knots, Bends, Hitches, Fishing and Misc, brings up a list of appropriate knots and clicking on one item of the list produces a window containing the details of that particular knot. About half of the window is taken up by a panel containing an illustration of the completed knot, captioned "FRONT". To the right of this panel is a smaller panel containing four captioned buttons, enabling one to bring up a description of how to tie the knot, its uses and to choose the front or back view of it. Below this panel of buttons is a separate button labelled "TIE" and clicking on this

changes the illustrated panel into the first of a series of illustrated steps, which are controlled by clicking on one of four buttons appearing below, labelled: "RUN", "STEP", "BACK UP", and "STOP". Using these one can run through the complete sequence, which is rather like a jerky animation, step between frames, go back, or stop, returning to the completed knot.

Thirty-five knots of various categories are included, with some emphasis upon fishing uses, the remainder being entirely practical single strand knots. No multi-strand, lanyard or decorative knots are included, nor is there any mention of splices.

This is the first computer programme of its kind that I have seen and I am impressed with it for several reasons. First it is very well planned and easy to use, which are important requirements for a teaching project. The choice of knots described may be limited, but anyone who can tie all of these has a good slice of knotting knowledge and will be well equipped to progress into more ambitious techniques. The "animations", if I may call the step-by-step illustrations that, are a little crude in execution, but they are effective and do the required job of showing what goes where. The technical difficulties to be faced in making a programme like this are considerable. Keeping the memory demands within the scope of most home PCs and still producing animated illustrations that do the job is just one of the obstacles that had to be overcome. The author, a new I.G.K.T. member, is to be congratulated and I, for one, hope that he will produce more programmes, to include other knotting categories. This is a notable step forward.

Frank Cooke's website, from which those with Internet access can obtain a demonstration of "Knots" and a screen saver is <http://members.aol.com/idfrank/knots.html>.

Stuart Grainger 3/12/97.

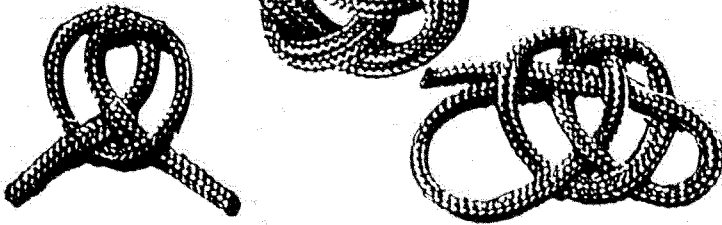
*'Strange but True'  
An Intriguing Alliance*

1. When does an 'Overhand Knot' become a 'Clove Hitch'.
2. When does a 'Clove Hitch' become an 'Overhand Knot'.
3. When does an 'Overhand Knot and a Clove Hitch' become a 'Figure of Eight'?
4. And when does a 'Figure of Eight' become an 'Overhand Knot' and a 'Clove Hitch'.

1.



2.



*Answer: When they all form a 5 bight x 3 lead with 3 part crown centre figure which I have named a Five Pointed Star Knot'*

3.



*The Overhand Knot and Clove Hitch methods will double into two ply. The Figure Eight will only double round the outer rim line. Just follow the diagrams.*

*Strange. I'll leave it to the mathematicians?.*

*John Halifax, Endeavour Ropecraft.  
Lowestoft, Suffolk, England.*

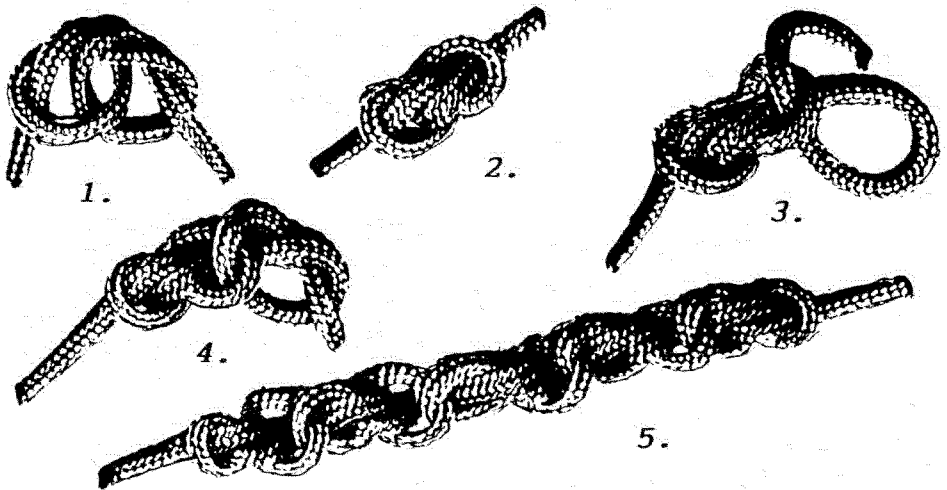
## A New Style Single Strand Chain Type Braided Sennit

Made from a succession of linked pairs of overhand simple knots as follows:

Make/form a pair of linked overhand knots as depicted and ease them nearly tight to form what I term as a 'Single Strand' 'Hunters Bend' that I described about three years ago in 'Knotting Matters'.

Now turn back the right hand side towards yourself and lead the end back through the bight to form a 'Slip Knot' and then take it over the top round the back and out through the front of the bight as shown. This forms a separate single link between each successive pair of linked overhand knot single strand 'Hunters Bends'. Now repeat the process. To make a pleasing new braid for 'Dog Leads', Knife Lanyards etc.

The finished graphic image does not do justice to the actual braid. Try it and see for yourself.



John Halifax, Endeavour Ropecraft,  
Lowestoft, Suffolk, England.

From: Dave Walker, Chester, England

At the last council meeting I suggested that a list of rope, cord, and braid manufacturers or suppliers of such, could be compiled. The other members thought it would be a good idea and then delegated the task to me. Therefore could all the readers of KM send me details of their suppliers names, addresses, telephone numbers and terms of supply and details of what they sell. I would forward this information to any guild members looking for supplies. I hope you could also put my name and address on a regular basis in KM in the designated responsibilities section.



From: Paul Evans, Hartlepool, UK.

I read the letters in the POSTBAG of K.M. and I feel I must reply. Percy Blandford likes the West Country whipping, as the sailmakers whipping, if done properly, the end would not be able to be pulled through. Stuart Grainger mentioned in another copy of K.M., that the Sheet Bend should be used to join two ropes together

instead of the Reef Knot. Now I have not been in the Guild very long and this is in no way meant to say some people are right and some are wrong. Since I have been in the Guild, I have had nothing but help and assistance from various members including Stuart and Des Pawson and I will always give way to experience and age. As a Boatswain in the British Merchant Navy (with 28 years service behind me and still going strong), part of my job is to help and train younger seamen to get their qualifications in seamanship. The governing body who sets the exams and who actually examine seamen is the Board of Trade. Their manual stipulates that to join two ropes of equal thickness you must use a Reef Knot and to join a rope of unequal thickness you must use a Sheet Bend. If anyone followed Stuart's advice and use a Sheet Bend instead of a Reef Knot then they would have failed their exam's. With reference to Percy's comment about whipping, seafarer's are taught three types of whipping: 1. West Country. 2. Palm and Needle. 3. Sailmakers.

While I have been to sea I have never put a West Country Whipping on anything except for my exam. The favoured one is the Sailmakers. If the end is brought up in the gap, where the two strands lie next to each other, pulled tight and to one side, the end you were pulling through will jam under the whipping. On certain ships I have been on, the dreaded insulating tape is preferred to the sail twine. I have just written a list of the knots/bends/hitches which I most use on board ship and these are:- Reef Knot, Sheet Bend, Bowline, Clove Hitch, Half Hitch, Figure of Eight, Round Turn and Two Half Hitches, Rolling Hitch and the Cats Paw. I have never used the Sheep Shank in my time at sea. With regards to splicing rope, the most common ones I use are the Eye Splice, Back Splice, Cut Splice, Ravens Claw, Long Splice. As far as wire splicing is concerned, since I mainly work in the North Sea, it is forbidden to use a "home made" wire splice for any form of cargo work. Strops and slings now have to be made ashore using a ferrule. The point of this

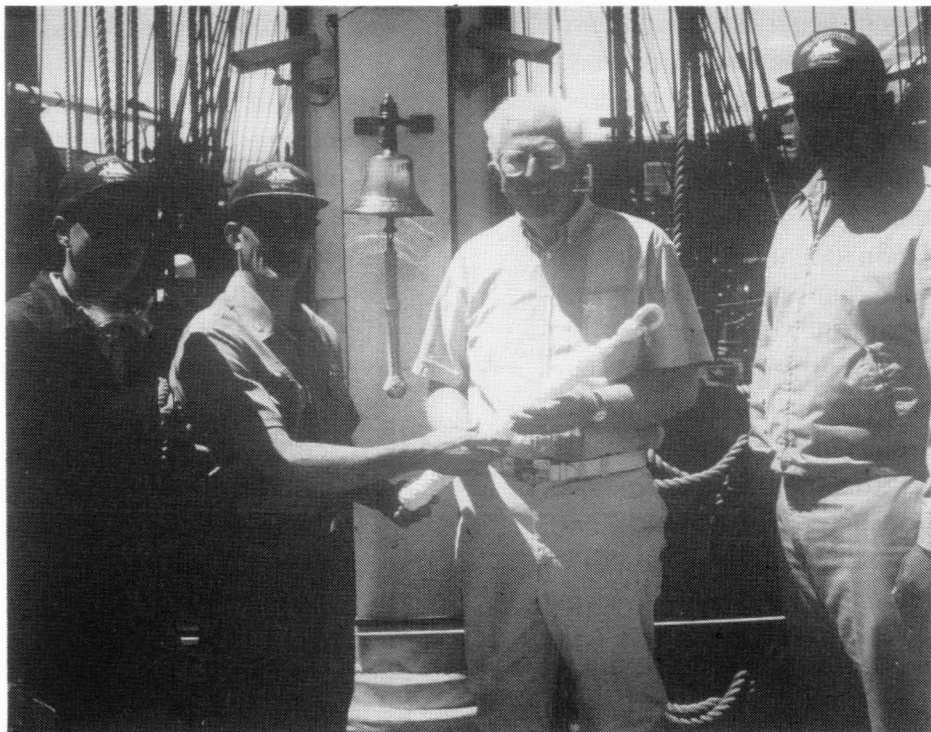
letter is, while people may have favourite knots, splices and whippings, they may have had experiences of mishaps, some of us have a code of practice to follow and if by putting the wrong knot in the right rope and something goes wrong, and it was discovered to be done in an un-seamanlike manner (not by the book) somebody has to answer for it.



Did anyone see 'Call my Bluff' in mid April last year, when Anna Ford was a panellist? If you did you would have been interested in her necklace. It appeared to be of some sort of plastic tubing joined at the front of the throat by a Reef Knot the ends of which had been led back, or let into the tube sides and concealed. An interesting modern version of this knot being used, as it has been for over two thousand years as personal adornment.

*from Richard Hopkins, Bristol, UK*





From: James Doyle, Massachusetts, USA.

In March, 1997 I took my 5 year old grandson on tour of the USS Constitution. Like all 5 year olds, he's into sailing ships and pirates and was very interested in the tour. While on the tour of the ship I noticed the existing "Bell Rope" could be replaced for her 200th birthday.

When I completed the bell rope, I wrapped it up as you would a birthday present and took it onto the Constitution. I had the paperwork in a 3 ring

binder to make my presentation to the commanding officer Michael Beck, Comdr USN, 64th Captain of the USS Constitution. The paperwork was a letter to Comdr. Beck RE: Bell Rope Gift and the specifications for the Bell Rope.

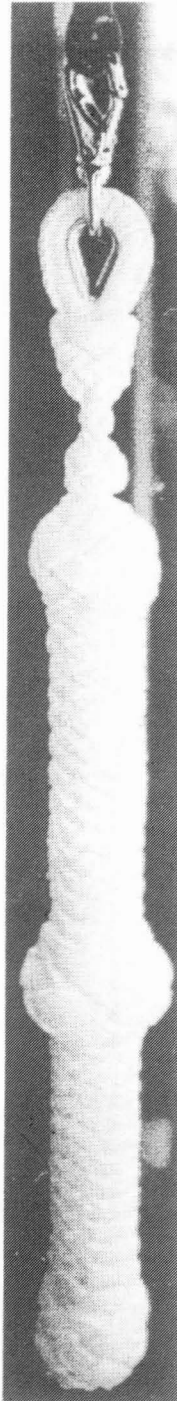
Upon my meeting with Comdr. Beck, I first gave him the binder with the paperwork on the "Bell Rope" and told him it was a new and improved bell rope for the USS Constitution's 200th birthday. He stated, after reading the paperwork, that it

was just what he needed. He was like a little child at a birthday party. He asked, "Could we please open that gift right now?" Upon opening the bell rope he said, "This is beautiful". Then we went up the gangway of the ship to see how it would look on the bell. At this point our pictures were taken with the bell rope.

On Thursday, 17 July 1997 "The Boston Globe" "Ironside's Journal" made mention of the "Flood of Collectibles for the USS Constitution", including mention of the bell rope

**SPECIFICATIONS**  
**OF THE**  
**BELL LANYARD**

- \*Brass Snap Hook
- \*Stainless Steel hard eye thimble covered with 3 stands of seine cord "Cockscombing".
- \*1- 5-Lead 4-Bight turkshead knot triple strand.



- \*1-8 strand doubles round sennit.
- \*1-3 Lead 4-Bight turkshead knot tripled.
- \*1<sup>1</sup>/<sub>4</sub> dia. wooden dowel filler.
- \*1-6 Lead 5 Bight turkshead knot four strands.
- \*8- Lines made into 3 tripled strands of "Coach Whipping".
- \*1-6 Lead 5 Bight turkshead knot, 5 strands with a "Mouse".
- \*8 Lines made into 3 tripled strands of "Coachwhipping"
- \*1-6 Lead 5 Bight turkshead knot 4 strands to cover the end of the lanyard.
- \*Paint: 2-Coats of pigmented primer sealer (Kilz) and 2-Coats of #21100 "Larcolold" white high gloss white (California).
- \*Seine Cord used: #72 3 Strand seine cord (200FT.) [T.W. Evans Cordage Co. Inc., 55 Walnut Grove Avenue, P.O. Box 8038, Cranston, Rhode Island, 02920, USA.

From: John Chesterfield, Cornwall.

Comments on a couple of bends, of which I enclose diagrams, would be welcome.

I saw bend A in print somewhere, but for the life of me I can't remember where. I don't think it was in KM, although it does appear to be similar to one of the forms of Owen Nuttall's Harmonic Bend (KM55 page 54). I must be very stupid, incidentally, because I can't get the right result for the Harmonic Bend. My source of bend A did not give it a name, but recommended it for its ease of tying, security and the good straight lead it offers.

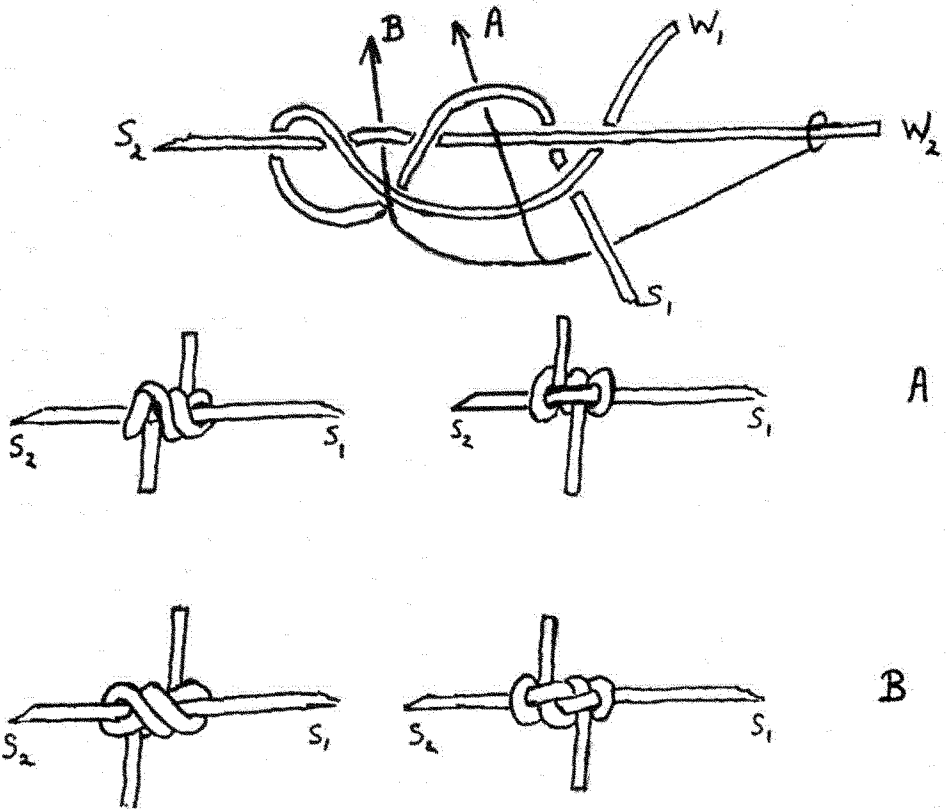
While playing around I inadvertently tucked the working end  $W_2$  as shown at B, and bend B was the result; a little longer than A, but possessing the same advantages and (to me) much more pleasing in appearance. I do not claim it to be "new" but I should be interested to know if any Guild member have come across it and where. I imagine the working ends could be cut quite short without loss of security.

I mentioned the word 'new', which reminds me that opinions on knot invention etc have been asked for with particular reference to correspondence in KM, without reference to specific cases. I am sure that all three writers of the letters in KM57 would agree that any pronouncement such as 'this knot is new' must always carry the qualification 'as far as we know'. In any case, the satisfaction in being credited with a 'new' knot is surely minor in comparison with the pleasure of sharing one's work with others. If the 'new' knot is decorative so that other people can enjoy the tying of it, that is good; if it is functional so that they can put it to practical use, better still. Either way, it is no longer one's own. There is also the element of chance in discovery, which must not be overlooked. For example, 'my' bend may be 'new' or it may not. If I am shown that, far from being original, it is well known to a score of other people, I'll suffer no pangs of disappointment. If on the other hand, it has never appeared in print (as far as we know), what have I got to be

proud of? I was trying to memorise bend A and made a mistake. No cleverness there - merely lack of attention to detail!

Finally, in KM57 page 53, Karl Nilsen has given details of his 'Nilsen Bend' which he thinks is original. Is it not the same as Desmond Mandeville's

'Poorman's Pride' (i.e. Rosendall Bend, Zeppelin Knot) published in Geoffrey Budworth's 'The Knot Book' (page 129, 131) ? If so, it in no way detracts from Karl's achievement in working it out for himself, especially as he offers a very good quick way of tying it.



After tucking the working end  $W_2$  as shown, either A or B, the bend is completed by pulling the standing parts  $S_1$  and  $S_2$  firmly in opposite directions.

From Robert Wolfe, Chicago, Illinois, USA.

Since our North American Branch had a conference in New Bedford, Massachusetts, I wanted to write and send some materials for publication in *Knotting Matters*. We had the good fortune to get some excellent press coverage, including a front page write up in the Sunday edition of the *Boston Globe* on August 3rd, with a diagram of how to tie Ashley's Bend using the 'famous' Wolfe ABC method.

The article came about after Greg Buck, one of the conference organisers, contacted the writer, Dave Arnold from the *Globe*, and gave him the names and numbers of the speakers, including me. When Dave called me in Chicago, he was fascinated and amused by the way in which the Guild formed, and the kinds of things we find interesting. So I mentioned my ABC system and how I felt it simplified the tying of Ashley's Bend, and he asked if he could see it, so I said sure, and I faxed it to him. He thought it would be a great interest piece to add to the article, so he had one of his

staff artists do it up. As you can see they made a mistake on the first diagram, so they reprinted a corrected version the following Sunday. There was also some local coverage in the *New Bedford Standard-Times*.

There were a huge number of responses to my ABC article, including letters from Geoffrey Budworth, Stuart Grainger, Pieter van de Griend and Des Pawson. I even got letters from Brion Toss and Charles Warner, these last two having been sent copies of my article by friends. From materials various people sent me, it appears that Harry Asher and Desmond Mandeville are clearly the Two knotters who have worked on exactly this type of problem. I regret they passed away just before I took up knotting. Harry Asher in fact was attracted to interlocked overhand bends in exactly the way I was, and found the same 'common link', only he approached it from two loops interlocking, using formulae, whereas I tried to simplify it by starting with a standardised overhand knot.

One thing I discovered is that every one of the bends I worked

with had been discovered: the 'U-Bolt Bend' was discovered by Desmond Mandeville - he called it 'Neat and New'. The 'Chicago Bend' was discovered by Harry Asher - he called it 'Shake Hands'. Lester Copestake took strong exception to my declaring that the Alpine Butterfly Bend wasn't a good bend. It's Lester's *favourite* bend, and Brion Toss apparently was the first one to put it in print - he called it the 'Strait Bend'.

I do, however, think I discovered a new loop, though for all I know it may be recorded somewhere. I've included a diagram of it - I call it the 'Pyramid Loop', and the bend form I call the 'Pyramid bend', because if you tie it in stiff nylon webbing, it forms a perfect 4-sided pyramid. Please try it out and see what you think.

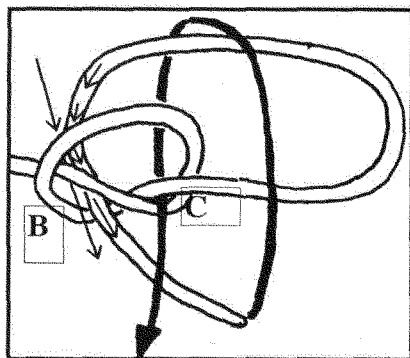
I am going to try to complete a super-abbreviated form of my ABC paper that might be appropriate for Knotting Matters. I realise now that the original form was way too long. I will probably also try to trace out the diagrams and scan them as black/white bitmaps, this should

allow them to be saved on one disk so that I can mail it to you. If Rob Schatein *ever* finishes his doctoral thesis, he will make a simplified PC version of his KnotPlot program and make it free to all IGKT members. I tried out the prototype in New Bedford, and I can unequivocally say that it will make knot diagrams much easier to do.

### PYRAMID LOOP?

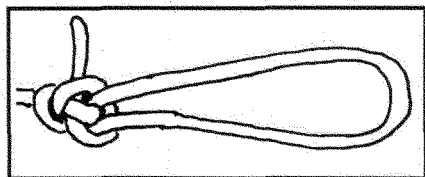
by Robert Wolfe

Here is a new loop knot I haven't seen before. In these diagrams, 'up' means towards the observer's eye, and 'down' means into the page, away from the observer's eye.

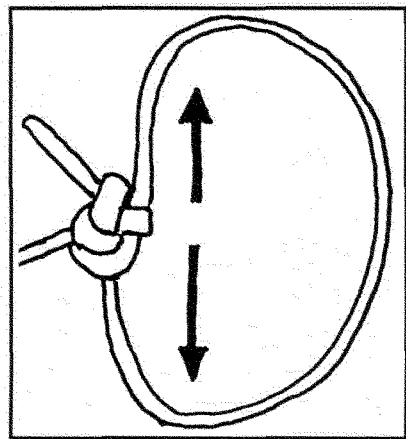


1) Start by making an overhand knot, and bringing the free end around passing it up the B (standing) space. Then pass the

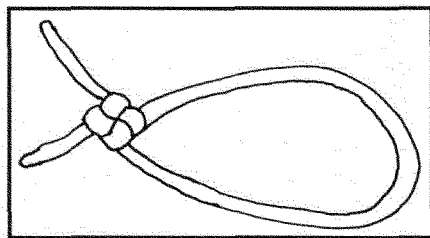
free end around and up the C (running) space as in the arrow.



2 This is the Pyramid Loop after tightening. The knot part looks like Ashley's Bend in front, and a Perfection Loop in the back.

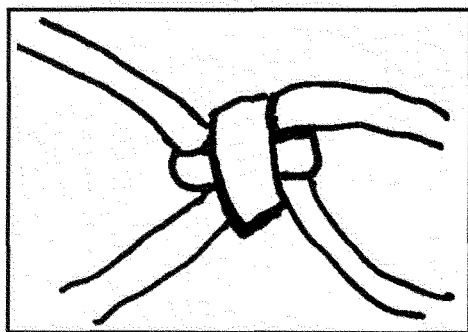


3 Now for a bit of reshaping: pull the loop part at the knot as shown by the arrows, so that the knot slips a little, then tighten all the ends



Front of knot

4 We now have a decorative loop, similar to the Chinese Crown Loop described by Ashley (#1066), only this is a different knot, that ties to a much snugger final knot. I have not been able to find this manner of tying described anywhere in Ashley (though it may be there). The front of the knot is shown above, and the back is shown below.



Back of knot

I would be interested to know if anyone has ever seen this knot described.





IGKT AUTUMN MEETING  
LIVERPOOL MARITIME  
MUSEUM

by Jonathan Farrar

Being a member of the North West Branch of the Guild, Dave Walker asked me to write an account of the Autumn Meeting. Although having never attended a 'Main'

disadvantaged by only knowing local members. A fault slightly rectified by the end of the day.

So in failing to be able to write a full appraisal I thought a personal account would suffice.

In the run up to the meeting I busied myself creating a knot board containing eight splices from Ashley using 6 mm cotton. Would anyone look at it? Was

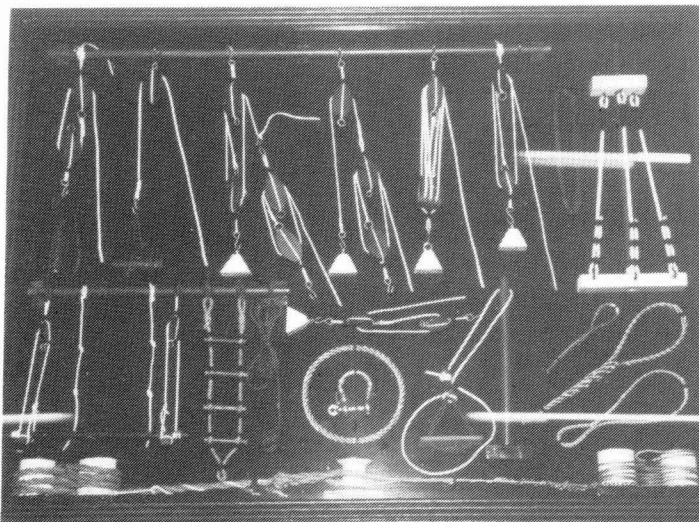


Frank Harris addressing the meeting.

meeting before, I agreed to the task. Taking minutes and logging all events cannot be too difficult - wrong! I was surprised at the enormity of the event and the number of activities which took place. I found myself immediately

one of the questions which came to mind during the preparation of the board.

Saturday morning arrived. I duly signed into the meeting and displayed my board amongst other North West work. I noted other knot boards

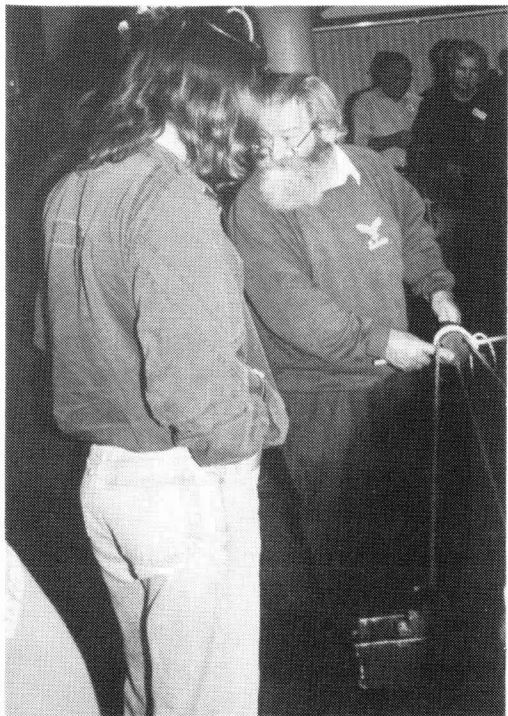


Knot Board of Rigging and 'Block and Tackle' (above)

Charlie Smith talking to a visitor while 'Making' rope in the hall.(below)

presented and all of exceptionally high quality. It was a relief that my first attempt at a board was unique on the day with it being the only one being based entirely on splices.

The meeting was called to attention and all business performed. I thought it was a nice idea to have the 'Members Profiles'. These help to amplify the diversity of knotting and those who partake in this activity. The speed at which the Official Business was undertaken and the obvious urgency to do so shows the spirit of the Guild. It is a





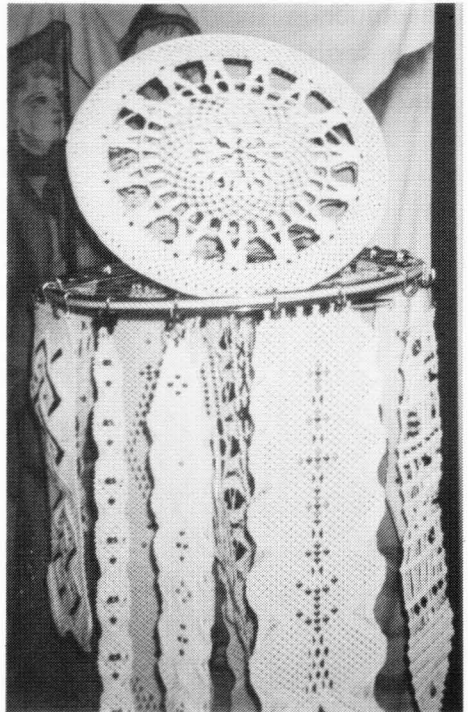
Geoffrey Budworth (left) and Ken Yalden (right) (ABOVE)

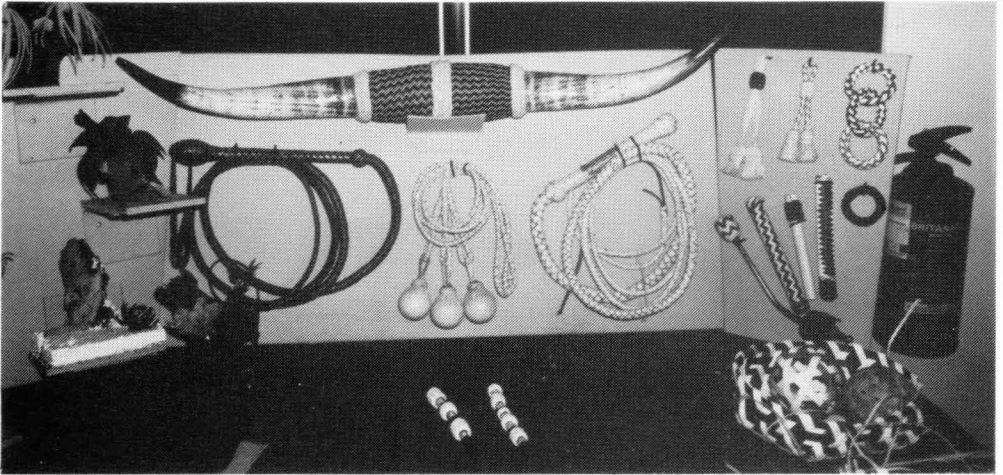
Geoffrey's bicycle wheel display stand. (BELOW)

professionally run organisation intent on having fun.

In the afternoon the room was rearranged and opened to the public. Holding the meeting in the maritime Museum ensured visitors came into the display. This provided a useful promotional opportunity for the Guild.

The remainder of the meeting appeared to consist of idea swapping and enthusiastic conversation. All display work was closely examined. Creators were more than willing to describe how they had achieved various effects.





One of many wonderful displays erected by the attending members.

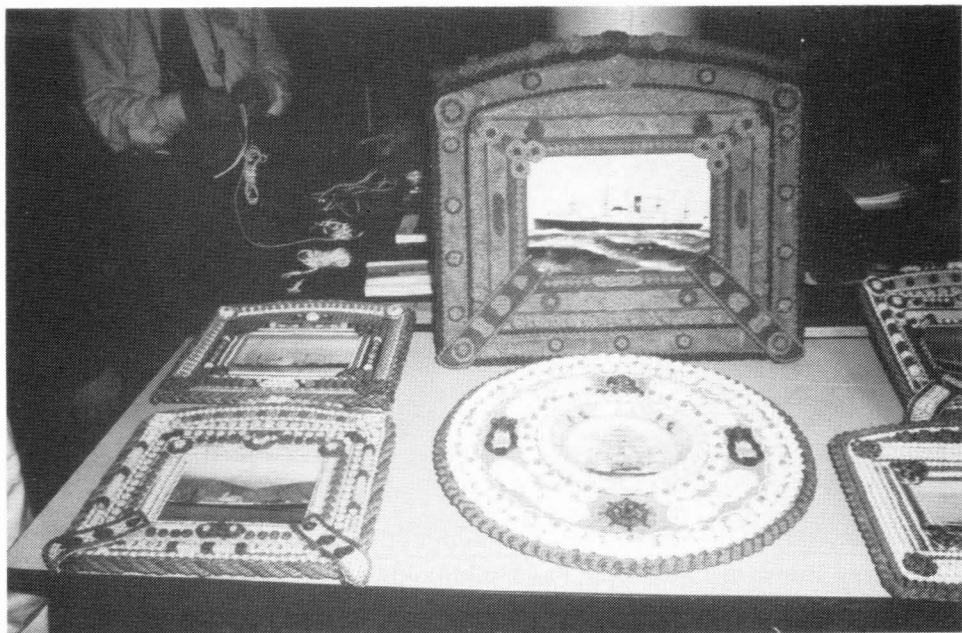
A most interesting aspect of the meeting involved a rope making machine. A hand-on approach to describing the technicalities of rope making ensued. This

enabled visitors to appreciate the process to a greater extent.

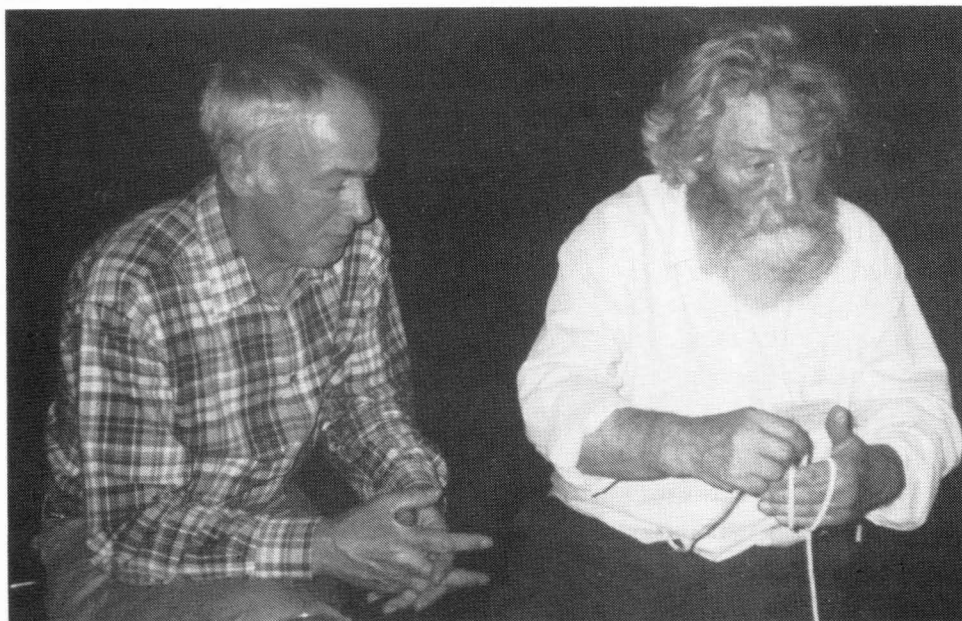
The afternoon concluded with a raffle. This produced a lot of North West winners. The

A practical puzzle in leather to take home with you.





Knotted frames with photos of ships of Liverpool by Bernard Cutbush.  
Dave Smith and Charlie Smith chewing over a few turns. (BELOW)





# DRAWING KNOTS WITH MICROSOFT DRAW

by Frank Brown

Like the majority of humanity, I have little skill at drawing freehand. However I have been instructed in the stern discipline of Engineering Drawing. So with help from the resident computer ace, I have developed a simple method of drawing knots that only needs a few thousand dollars/pounds worth of electronics. Richard Miles showed in his book on symmetrical bends the simple elegance of straight line drawings for representing knots. Taking note of Richard's method and using a couple of tricks and materials used widely by many scientists and engineers, I now have a system that can produce an easily interpreted drawing in a short time. I should also point out that I am a total amateur as far as computers are concerned. So if this method works for me, then it's falling off a log time for every body else.

## MATERIALS

1. Computer with Microsoft Draw. This program is part of Word, Excel, Power Point and I am told that there are a heap of similar programs readily and cheaply available.
2. Coloured, flexible, cord. I prefer to work with 2 mm red and blue nylon, but to each their own.
3. Graph paper with 5 mm squares.
4. Coloured fine point pens, or pens that give clearly different line thickness.
5. Corktile or similar pin board with pins. I use long dressmaker's pins with large coloured heads as they are easier to find and pick up off the floor.
6. Reams of scrap paper.

## THE METHOD

1. Tie the subject knot in suitable cord, preferably with two colours in the case of bends.
2. Loosen off the knot preserving the basic structure, so that all the crossings and individual leads can be clearly seen.

3. Draw the knot as seen showing all the crossings clearly. (Fig.1)

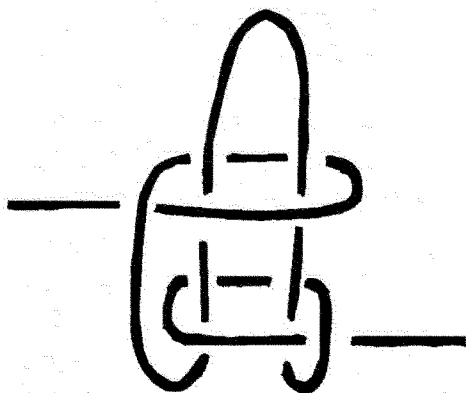


Fig 1

4. Redraw the knot in a squared up format (Fig.2)

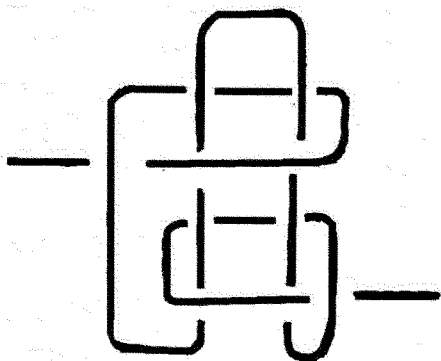
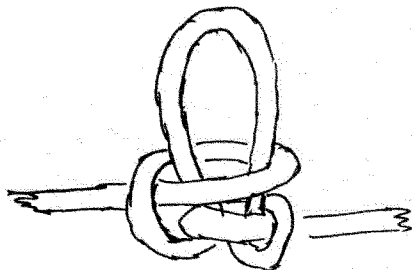


Fig 2



Middlemans Knot

5. Draft this version on the graph paper (Fig.3)

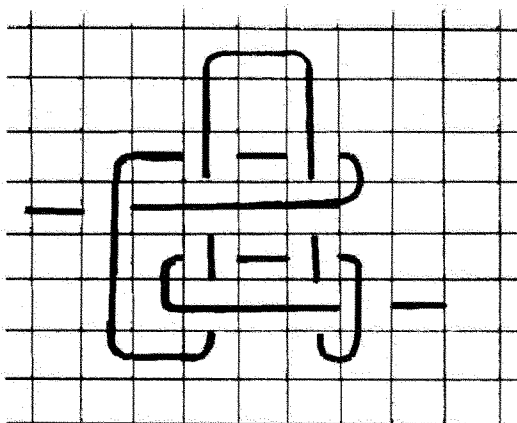


Fig 3

6. Fire up the computer and select the drawing program.

7. Select the "Snap to Grid" option.

8. First draw a square, a line with the same length as the side



of the square, and a quadrant (Fig.4). At this point save the drawing for future use - I call the file "Elements", and copy to a new file for the subject drawing.



Fig 4

9. Duplicate the squares by copying and pasting and arrange in a line equal to the number of squares in the graph drawing (fig.5). Duplicate line of squares and form a lattice (Fig.6).



Fig 5

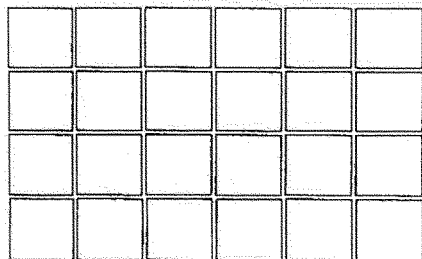


Fig 6

10. Duplicate the line and quadrant as required and place in the appropriate squares using the "drag" tool. With the "Snap to Grid" the alignment is automatic (Fig.7)

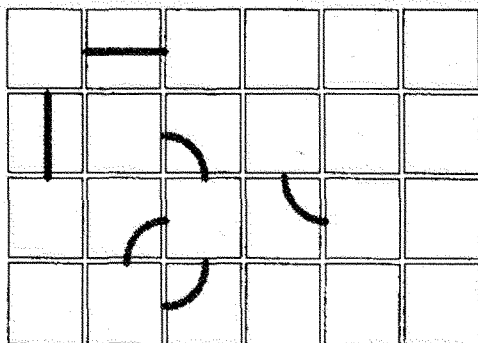


Fig 7

11. Flip the line or quadrant to the desired position using the "Flip" tool or command.

12. Continue until the drawing is complete and erase all unwanted squares, lines and quadrants.

13. Check using Print Preview and print.

14. For multi cord knots use lines and quadrants of different colours and thickness.

The process takes me about an hour if I do not make many mistakes. I try to keep the number of lines to a minimum but I

## KNOTPLOT

*from Robert Wolfe written by  
Rob Sharein*

always show each side of a crossing even if it is obvious that the line is passing beneath two or more other lines (Fig. 8).

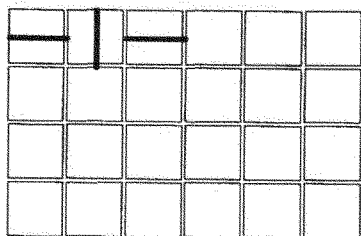
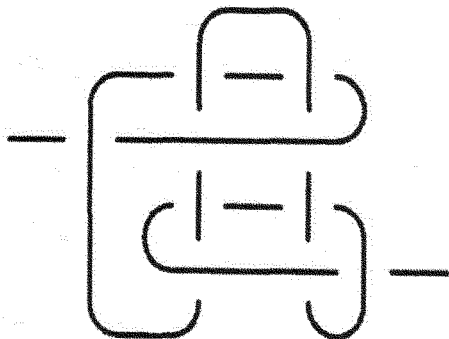


Fig 8

It has taken me about 10 hours to get the method sorted and gain some form of competence. No doubt some computer literate sage could suggest improvements and I would be pleased to receive advice and comments. So now you can draw your own conclusions.



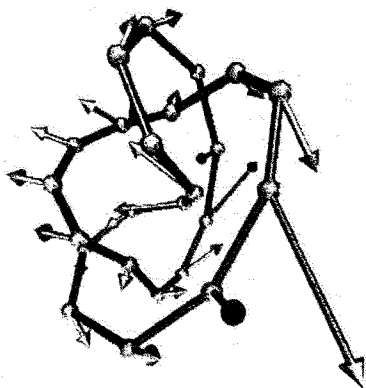
End Product.

I was thinking about Rob Sharein's program, KnotPlot, and I thought it would be of interest for other IGKT members to see exactly what I was referring to when I discussed this, so I took the liberty of downloading some information from Rob's KnotPlot website. I am sure Rob will be delighted in showing his program (a comment to me recently was "...if Rob would just stop playing around with his computer program and get to work he would get his PhD finished.)

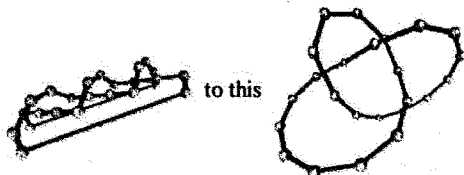
*Ed: we have decided to include all four of the pages sent in by Robert as it all looks very interesting. Those of you lucky enough to be hooked up to the Internet will, I am sure, be able to get lots more, this is just a taster.*

# Knot manipulation

## Dynamic Manipulation



Any knot or link can be relaxed using a variety of dynamical models. The picture shows the forces acting on a trefoil created from the Conway notation. This allows the knot to go from this



automatically ([MPEG animation 50 kbytes](#), see the [knot theory page](#) for more animations).

The dynamical model used most frequently consists of two components:

- An attractive force applied to adjacent "beads" on the knot. The beads are the yellow spheres in the above picture. This makes each of blue cylinders act something like a spring.
- A repulsive "electrical field" acting between all other pairs of beads.

In most situations, these two forces eventually balance out and something approaching the canonical shape of the knot results.

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Go to the [KnotPlot Site](#) or [Rob Scharein's main WWW page](#).



# Knot theory



Note: This page is part of the [KnotPlot Site](#), where you'll find many more pictures of knots and links as well as MPEG animations and lots of things to download.

Knot theory is a branch of algebraic topology where one studies what is known as the placement problem, or the embedding of one topological space into another. The simplest form of knot theory involves the embedding of the unit circle into three-dimensional space. For the purposes of this document a knot is defined to be a closed piecewise linear curve in three-dimensional Euclidean space  $\mathbb{R}^3$ . Two or more knots together are called a link. Thus a mathematical knot is somewhat different from the usual idea of a knot, that is, a piece of string with free ends. The knots studied in knot theory are (almost) always considered to be closed loops.

Two knots or links are considered equivalent if one can be smoothly deformed into the other, or equivalently, if there exists a *homeomorphism* on  $\mathbb{R}^3$  which maps the image of the first knot onto the second. Cutting the knot or allowing it to pass through itself are not permitted. In general it is very difficult problem to decide if two given knots are equivalent, and much of knot theory is devoted to developing techniques to aid in answering this question. Knots that are equivalent to polygonal paths in three-dimensional space are called *tame*. All other knots are known as *wild*. Most of knot theory concerns only tame knots, and these are the only knots examined here. Knots that are equivalent to the unit circle are considered to be unknotted or trivial.

The simplest non-trivial knot is the trefoil knot which comes in a left and a right handed form.

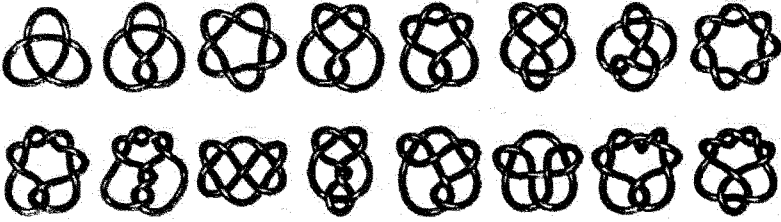



It is not too difficult to see (but slightly more difficult to prove) that the trefoil is not equivalent to the unknot. Also, the right and left handed versions of the trefoil are only equivalent if the homeomorphism mapping one into the other includes a reflection (other knots, such as the Figure-8 knot *are* equivalent to their mirror images, these knots are known as *achiral knots*).

## Knot tables

Knots have been catalogued in order of increasing complexity. One measure of complexity that is often used is the crossing number, or the number of double points in the simplest planar projection of the knot. There is only one knot with crossing number three (ignoring mirror reflections), the trefoil or cloverleaf knot. The figure-8 knot is the only knot with a crossing number of four. There are two knots with a crossing number of five, three with a crossing number of six, and seven knots with a crossing number of

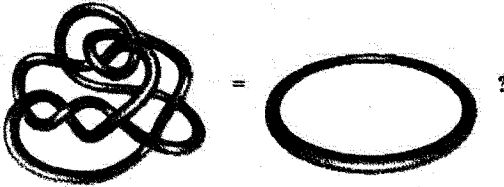
seven. From there on the numbers increase dramatically. There are 12965 knots with 13 or fewer crossings in a minimal projection. Following are pictures of the sixteen simplest knots:



Knots such as the square knot  are usually excluded from knot tables because they can be

constructed of simpler knots. Knots that cannot be split into two or more simpler knots are called *prime*.

It is not always easy to tell when a given picture of a knot is the simplest possible picture for that knot. For example the following is the unknot:



The interested reader may enjoy trying to untangle this beast by making a sequence of knot diagrams. If you give up, check out the [MPEG animation](#) of the [untangling](#) or [download it](#) (106 kbytes) if your browser doesn't support MPEG viewing.

## KnotPlot Relaxations

In the first three of the following animations, the starting configuration of the knot is specified by the Conway notation. The knot then relaxes under the simple [dynamics](#) used by KnotPlot (the arrows are force vectors).

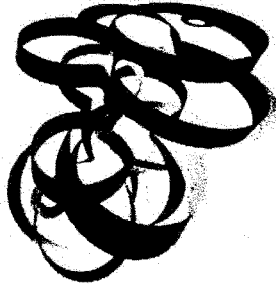
- [Trefoil](#) (MPEG, 50 kilobytes), [KnotPlot input script](#).
- [Figure 8 knot](#) (MPEG, 57 kilobytes), [KnotPlot input script](#).
- [6.3 knot](#) (MPEG, 95 kilobytes), [KnotPlot input script](#).
- [An animation](#) of a six-component [Brunnian link](#) falling apart after one component has been removed (380 kilobytes).

More information and animations will be available soon.

## Higher dimensional knot-theory

Knot theory is extendible into higher dimensions. Generalized knot theory considers embeddings of the  $(N - 2)$ -dimensional sphere into an  $N$  dimensional sphere. In 4D knot theory we consider the embeddings of 2-spheres. There are a number of ways to construct knotted 2-spheres in 4D.

- Suspended knots --- A ordinary knot in 3D can be *suspended* in 4D to create a knotted 2-sphere.
- Spun knots --- One problem with suspended knots is that they are not smooth at the poles. While this might not seem like an important fact, it is actually not possible in general to smooth out the poles. One way to get a smoothly embedded sphere in 4D is to *spin* a 3D knot about a plane in 4D.
- Twist-spun knots --- A generalization due to Zeeman of spinning. This method produces knot types that cannot be produced by ordinary spinning



Check out an [animation of a rigidly rotating twist-spun knot](#) or [download the MPEG file of the animation](#) (418 kbytes).

Some strange things happen in higher dimensions with links, see the [Linking Spheres](#) page.

## More about knots and links

To learn more about knot theory, go to one of the following sites:

- Charilaos Aneziris's [Knot Theory Primer](#).
- [Untangling the Mathematics of Knots](#), part of the wonderful MegaMath project.
- This page of mine has links to [other people in the business of relaxing or drawing knots](#).
- An incomplete but growing list I've made of [books about knot theory](#).
- Peter Suber has compiled an excellent page about [Knots on the Web](#), there you'll find links to sites about knots from many different perspectives, from the practical to the purely aesthetic and abstract.
- Another great site with knot-related resources listed is the [Ropers Knots Page](#) with an extensive [page of links](#) to all sorts of other knot sites on the WWW.

## MEMBER'S PROFILE

**Brian A Glennon**  
Nova Scotia



I was born and raised and still reside in Boston, Mass but as far as knots are concerned, I give credit to my father for having instilled an interest in knot tying in me, at an early age by having me snell the hooks he used to long line for cod from 1966 to 1969.

It was through SCUBA diving that I applied my knots with light salvage work, this compelled the need to learn more knots. The first knot I taught

myself out of a book was the constrictor knot from *'Commercial Oil Field Diving'*

by Nicholas B Zinkowski (1972). Securing a line to an underwater object was my occupation during my early teenage years. It was a source of pride for me to see an object break the surface with the proper hitch I had tied in zero visibility.

I learned how to splice during my four years in the

US Navy as a 2nd class Diver and this was my first exposure to wire rope and braided rope splicing, as well as to the Ashley book of knots. Interestingly enough, I ignored Ashley's since I was learning a lot of ropework first hand from the divers and boatswain's mates, then rediscovered Ashley's several years later.

After the Navy I attended college and worked at various local boatyards and marinas. I was hired by a local ship chandlery

as a rigger in 1987 and have worked there part time since. Meanwhile pursuing other rope related jobs, including: Sternman on a lobster boat, line handler on a tugboat, rigger (WG10) for the USS Constitution, rigger for the Boston Tea Party Ship - The Brig Beaver, and a dinghy sailing instructor on the Charles River. Despite my ship bound occupations I still relate to being a 'diver' and not 'surface skimmer'.

Currently I have taken a three day rope rescue course with the Boston Fire Department and taught two splice workshops at a local university.

I am now serving as Bo'sun on the HMS Rose, a square rigged sailing ship, for the past four months, having circumnavigated Newfoundland, and I spent three months on board the Bounty last winter in an unexpected yard period.

My future plans include starting a rigging shop in Boston and read more of my 1944 edition of 'The Ashley Book of Knots' while having a lot of fun as a member of the IGKT. Thank you.

*Ed: thank you Brian, a good full profile, come on some of you others, I know you must have led nearly as interesting a life as Brian.*

## **BOOK REVIEW**

by Geoffrey Budworth

### **Celtic Knotwork Designs by Sheila Sturrock**

*published (1997) Guild of Master*

*Craftsman Publications Ltd*

*ISBN 1-86108-040-9*

*UK Price £13.99*

The book is written for all those people who have previously tried plotting Celtic knotwork and failed. The author, who is primarily a versatile and accomplished exponent of paper related crafts, devised her own methods for constructing the knot patterns when she experienced the same frustration.

With a clear and simple text, over 200 designs and more than 20 photographs to motivate her readers, she guides us from basic beginnings to creations as elaborate as those done by the ancient scribes.

The book has a soft cover and is 249mm c 186mm x 11mm, with 184 pages.



Part one covers history, materials and techniques; Part two deals with the designs - hearts, loops, combinations and corners, and introduction to zoomorphics; Part three explains how to create your own designs and how to use Celtic knotwork to embellish other crafts.

Colour is effectively used throughout this manual, which is beautifully designed and real value for money.. With the long winter nights ahead, (well in the Northern latitudes anyway), look no further than this quite excellent book for an absorbing new pastime or new light on an existing one.

---oOo---

The following is an article taken from *Knot News* the newsletter of the International Guild of Knot Tyers - Pacific Americas Branch, they published it in November 1997, by kind permission of the author, **Louie Bartos**. We thought it may appeal to a wider audience so here goes.

### THE SAILOR'S TRADITIONAL DITTY BAG

The Ditty bag is a 'small bag in which a sailor keeps small tools and equipment, also personal articles' according to John Rogers in *'Origins of Sea Terms' a modern glossary of seagoing terminology*. But what is a ditty bag and how did it evolve?

The ditty bag and the sea bag, a relative of the ditty bag, were the first projects for an apprentice either in the sailmaker's trade or a working seaman. The reason for this is that these items incorporated primary skills required when making and repairing sails. According to Mcleod (1947), 'Apart from the use of the gear, making a bag is good practice for other jobs where cutting out is involved', referring to the sea bag itself, "among old timers' there is a tradition that a 'proper sailor's bag' must contain five flat seams, the bottom also being put in with a flat seam" Besides learning the techniques of seaming, making twine grommets and sewing eyelets, the bags were an essential part

of the sailor's sea-going wardrobe.

There are innumerable variations of the ditty bag; some are very intricate but most are simple and functional. They did have, and still do have one common purpose and that is to hold the sailor's personal possessions and some tools of the trade. It was said that the old sailor referred to his ditty bag as a 'housewife', because in it he had all the essentials for repairing his clothing, personal belongings and generally everything on deck. For an unknown reason the bag was also referred to as a 'jewing bag' and was hung from a hammock ring, or perhaps a hook or peg next to his bunk in the forecastle. These bags generally were companions to the sailor's sea bags or sea chests. Though these items were widely used, little is known about their origin and how they evolved.

The ditty bag goes a long way back in history as do many traditional maritime methods and implements. The origin of the name is lost in the fog of time. It is stated by Admiral Smyth (1867) however, in his

'Sailor's Word Book', that the ditty bag got its name from the word 'ditties' or Manchester stuff, from which it was once made. This too is somewhat obscure, since little is known of 'Manchester Stuff'. The manufacturers of textiles in Manchester deny ever making such cloth. It was said the bag was cut and sewn by the sailmakers and was twelve inches in length and five inches in diameter. This varied greatly however, as I observed when investigating early and latter-day bags in museum collections. In 1923 an answer to a query in the 'Mariner's Mirror', on the origin of the ditty bag, emphasised the ambiguity of the origins of these names. They pursued the word dight, in the Oxford Dictionary, a word with many meanings, but one is, '*to repair, put to rights, put in order*'. It is said that this word's latest use in general speech was in 1850, but that it occurs in dialect as late as 1877. It can be assumed that from these sorts of origins the work found its way afloat. An alternative theory suggests that the word came from Scotland or Northern England, and

that it could have been derived from the term 'duds', 'duddies' or 'duiddies' denoting clothes. especially working clothes. This seems unlikely however since ditty bags were not large enough to carry clothing. There seems no solid evidence pointing to the word's true origins.

The general contents of the ditty bag varied little from the sewing basket of a frugal housewife ashore (with the exceptions of some sea going paraphernalia); hence the name 'housewife' which was given to it. It is said that in the Royal Navy they contained beeswax, varied needles, buttons of different types common on clothing of the period, pins, white tape, Dutch tape, thimble, whited brown thread, black thread, worsted blue and scraps of light duck. These items were generally carried in a small wooden box, round or square, or rolled in cloth, tied, and carried in the ditty bag along with the owner's other personal items. An interesting quote from Bechervaise (1839) referring to 1820, "Thursday, making and mending clothes occupies the whole day, when Jack has a fair

opportunity....of examining his ditty bag and having a view of all the little presents 'ere he left home."

There are other historical references to the contents of the ditty bag - a marlinspike, a fid, a palm and needles, a bullock's horn full of grease and sundry other articles to make the work easier; Holmes (1903).

Moffat (1910) noted, "I wonder how many sailors of the present day carry the ditty bag which, in my time, was hung up at the head clew of every sailor's hammock, and which contained marlinspike, pricker, palm, seam rubber, sailhook, a case with needles, usually hitched all round with twine, the tip of a horn full of grease, and a fancy little serving board."

## THE STRUCTURE OF THE DITTY BAG

As I have mentioned, ditty bags varied in size, quality and intricacy. The one common aspect to all bags was their size and cloth weight. From the measurements and photographs of many ditty bags in maritime museums and other collections I was able to determine the aver-

age dimensions of old ditty bags. The average diameter was six inches, with the typical length of fourteen inches. This average, as is the case with so many artifacts of the seafaring trade, is variable. Ashley (1944) gave an average bag diameter of seven inches and length of fourteen inches. The lanyard lengths are possibly the most variable, not only in length but style. That is, they vary from the most rudimentary to the most exquisite in fancy work and quality of workmanship. The average length of the lanyard is about eighteen inches, with each leg length approximately half to two thirds of the circumference of the bag. The fancy work of the lanyard handle is approximately six to eight inches in length. The lanyard was fastened to between four and twelve hand sewn eyelets, generally sewn around handlaid marline grommets. The cloth used in the construction of the ditty bag was generally No 12 duck canvas or lighter.

There are departures from the common cylindrical flat bottomed bag, the most notable

being in the Peabody Museum in Salem, Massachusetts. The bag is made of four panels measuring five inches in diameter and twelve inches in length. The four longitudinal panel seams are sewn together with a cloth piping of contrasting colour, in this case black. The bottom, though a continuation of the side panels, is cut approximately half an inch greater than half the diameter. These pieces are cut into slightly curved gores which, when sewn together with piping, form a bowl shaped bottom. It has ten lanyard legs, fastened to quarter inch outside diameter eyelets that were sewn into one and one half inch tabling. This is an outstanding piece of workmanship. Another example similar to this bag can be seen in Ashley (1944), in the preface photographs. (#3677 & #3681). Another bag of similar design is described in Smith (1960). Using a single piece of cloth, a hexagonal bottom is formed by cutting six gores which are then sewn together without contrasting piping. This bag measures seven and one half inches in diameter and twelve inches

long, and utilises only six lanyard eyelets.

## MAKING A TRADITIONAL DITTY BAG

For those readers interested in making a traditional sailor's ditty bag, the following pattern can be used.

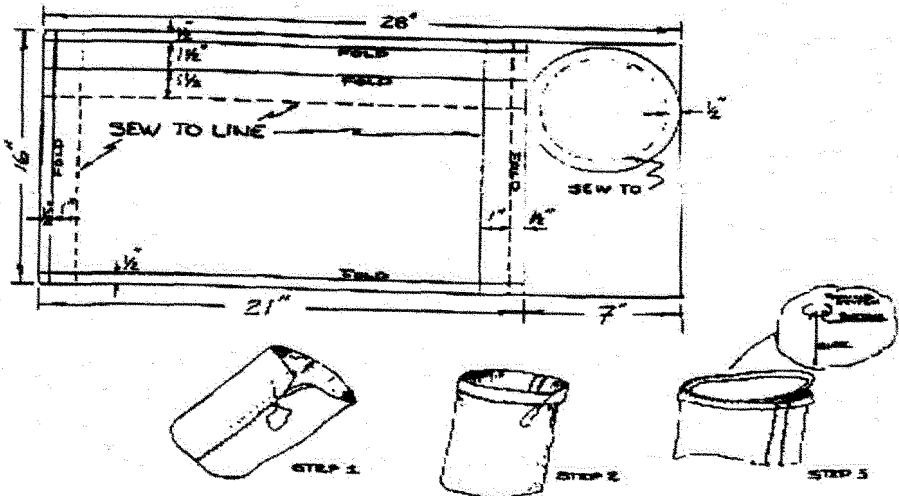
In order to make a bag that measures six inches in diameter and fourteen inches high, a piece of light canvas sixteen by twenty eight inches is required. From this canvas two pieces are cut as shown in the plan drawing. One is sixteen by twenty-nine inches, and from the remainder a circle seven inches in diameter is made. To make the construction of the bag easier, it is best to mark and fold all the seam 'sew to lines' and grom-

met holes.

Since this is not a 'how to' article, I will not go into the method of construction, sewing techniques, grommet and lanyard making etc. This is well documented in books listed in the accompanying reference section.

This article merely scratches the surface of the history, form, and variations of the sailor's ditty bag, and should not be considered in any sense definitive. If any readers have any further information regarding these items I would be very pleased if they could contact me.

Louie Bartos is a sailmaker from Ketchikan, Alaska.



## A KNOT PUZZLE

*from the same newsletter as the previous article:*

Joseph Schmedbauer (*Editor*) found this knotting word search on the Internet and I thought it might be fun to see how many knots YOU can find without an answer key. My thanks to the Greater Victoria Region of Scouts Canada.

E	D	B	D	A	E	H	S	K	R	U	T	O	E	V
K	S	N	A	M	R	E	H	S	I	F	V	Y	W	T
I	S	H	E	E	P	S	H	A	N	K	E	M	T	M
P	F	Q	H	B	P	K	P	I	L	S	O	I	Y	W
S	S	B	S	K	K	M	T	O	P	N	M	L	M	H
E	W	U	K	T	K	C	N	L	K	B	F	L	I	D
N	C	O	R	T	H	G	I	E	E	R	U	G	I	F
I	E	I	A	G	S	C	Y	R	E	V	H	O	T	R
L	V	M	L	P	E	S	B	T	R	W	W	V	A	O
R	O	F	L	P	F	O	T	O	A	A	T	E	U	L
A	L	I	E	I	S	U	N	Y	W	W	C	R	T	L
M	C	B	S	E	B	K	M	S	F	L	A	H	L	I
E	T	T	T	H	R	A	C	P	H	E	I	A	I	N
Y	L	L	O	D	N	O	M	A	I	D	O	N	N	G
E	O	G	K	S	H	E	E	T	B	E	N	D	E	N

So come on all you world-wide members let us have a competition to see who comes up with the most knots, send with the number and list of knots to the editors. The prize? The simple joy of knowing you are the best and brightest.

## WHY KNOT?

by Mariann Palmborg, St Vincent, The Grenadines

My little business, called 'Why Knot?' was started in November 1996, I sell my things from my colourful 1958 Landrover in the harbour of Bequia in the tourist season.

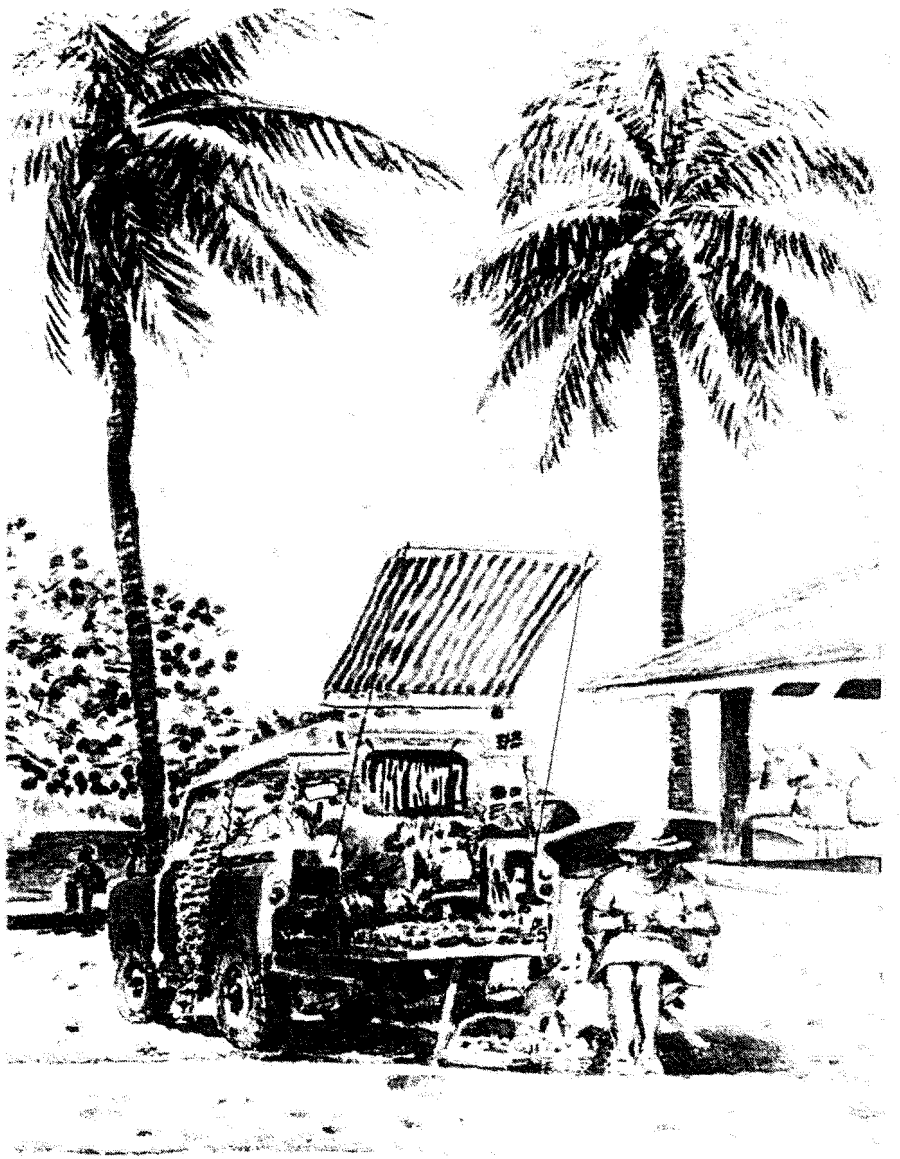
I started the business recently but I have been 'knotting' for a long time - my interest started in 1971 when I was sailing with delinquents on a big old schooner that was owned by the Nautical Museum of Oslo. The skipper was a passionate 'knotter' and taught me to sew my sailor's bag with 7 seams (for the 7 seas) and that was it!

So here I am sitting in the street doing my work, and the old sailors of Bequia talk to me often and tell me interesting things about knots. Kids love to stop by me and I teach them a little now and then, (they do not realise they are being taught) so I am doing what I can to promote the art, craft and science of knotting in this end of the world. Actually I am a part of a Craft Exhibition in Kingstown on St Vincent Island at the moment, trying to get the locals

interested in marlinspike seamanship. In this country we have had some people doing macramé, but most of them have stopped. I am the only knotter here at the moment.

I have a lot of problems getting materials of special sizes and natural ropes, maybe someone could tell me where I can get help. My address is as follows: Mariann Palmborg, c/o Fixman, Frangipani Yacht Services, Bequia, St Vincent and The Grenadines, West Indies.

*Ed: we met Mariann at the Liverpool AGM, she had travelled all the way here for the meeting. She is very keen and interested, so please can anyone help her, it is worth helping her just to use that so exotic address. Perhaps she can write an article on the way she was taught to sew her Sailers Bag with 7 seams for the 7 Seas. The picture it conjures up is wonderful. The following article is by Mariann's companion and is very interesting as to how they came to their part of the world.*



*ALB - Regua '97*



## HOW WE CAME TO BEQUIA

by Peter 'Fredag'

There were many reasons why Mariann and I did such a crazy thing as to build a ship in our back garden.

Together we shared the need for a greater challenge than our boring house and garden life, or a nine to four job could offer.

Our homeland being in a state of environmental, political and ethical decline, released the energy needed to escape, to get away from it all. We had been standing on the barricades for too long, and we felt we had done our share in the battle.

There wasn't really much to hold us back. The cold, dark and depressive Arctic winter certainly didn't.

And then there were the dreams. Of crossing tranquil oceans on gentle tradewinds. Finding our own tropical island paradise, with maybe a hidden treasure or two. Living alone with nature, with no money problems and not having to get up every morning at six thirty to catch the six fifty five to the office.

We built the 'ark' in record time, hammering and gluing around the clock for three years. She was launched on a Friday and given the name FREDAG, meaning Friday or Peace day in Norwegian.

The old battered car, TV and lawnmower and all our belongings that would not fit into our tiny, nautical world, were auctioned off. The car covered the cost of the charts for sailing around the world, from Oslo to Oslo, a circumnavigation planned to take six years (it didn't). With a brief stop in the West Indies (it wasn't).

At the time, Grenada was the only island I had heard of. Bequia was there all right, on my map, but I never noticed the little island with the funny name. Little did we know then, that this place was to become an important part of our lives.

We spent a reasonably trouble free year cruising Europe, West Africa and crossing the Atlantic, but on our way from Puerto Rico to Brazil we hit on the Grenadines. And we hit too hard.

Due east of Union, about midnight on 3 July 1985, under

a full moon, with heavy seas running with gusty, strong winds, our dream came to a sudden halt. We developed steering problems in a nasty reef area, and it all happened in half a minute.

It was a night to remember. Our gallant vessel thrown up onto the boiling reef and lying there on its side like a huge, dead duck. Enormous Atlantic swells broke over her trying hard to break her back. Conditions were too bad for any help. Mariann got badly burned when the engine overheated and decided to throw up over her from its nearly upside down position. Our newly assigned inexperienced crew was in a state of shock. What a mess!

I lived through that night praying her timbers would hold up to the beating and that a US Navy helicopter would just happen to pass by and lift ship and crew away. There was not much we could do other than wait for the Coast Guard. I survived mentally by making a five hour attempt to light up a cigarette.

Sunrise revealed a terrible mess, but the hull and our

growing optimism seemed intact.

During the coast guard's heroic attempt to tow us off, everything that could go wrong, did. The towing hawser angle was too wide, causing her to fall over on her other side. With a heartbreaking crash, our FRE-DAG was holed in five places under the water line.

Then communications broke down totally, with our saviours taking our thirty ton home on a crazy joyride over the reef, tearing off into open water with her belly ripped open, only to find her a watery grave, way down fourteen fathoms.

I will never forget those traumatic minutes climbing the ratlines with the seas grabbing for my ankles and me finally caressing the top of the mast as it silently slipped away down under.

We spent so much time under water that we nearly developed gills. First bringing up all valuables, sails, rigging and equipment for as much buoyancy as possible. And finally filling her insides up with air, pumped into empty oil drums, jerry cans, dinghies and lift rafts.

I will always, as with the bad memories, also carry those precious good ones. Like when she burst to the surface, rolling from side to side like a happy whale, that golden moment sitting in the cockpit, tears streaming, drinking champagne after hoisting the red, white and blue flag again.

It was during this time, and the years that followed, while trying to restore and rebuild with what little we had left, that we discovered the people of the Northern Grenadines. Without their help, encouragement and honesty, the FREDAG would today be a declining dive site.

During the wrecking and our time spent as beach-campers, nothing was 'borrowed', lost or stolen. Fishermen from far off would bring back odds and ends that had drifted off as she sank, never asking for 'something' in return. Quite a different story to all that bad news about piracy, pilfering and exorbitant salvage claims.

With FREDAG on her customary mooring (two boat lengths from the Frangipani Bar), under sail again, but unfit for long passages and a totally

deprived bank account, there was not much we could do other than sell, or leave her and go back to Norway to re-join the rat race.

But there was something about Bequia that made us abandon those undesirable options. Something to do with the 'pulse' of the island. In addition we had the possibility of doing charter work, and Barclays reached out a helping hand, (I have since regretted and taken back all bad things I have said about bank-managers).

Feeling the Bequia pulse for too long can cause addiction. The longer you stay, the harder it is to leave. It took us five years to get back on our feet again, a long time due to an amazing aftermath of more mishaps, as if the first wasn't enough.

Twice dismayed at sea, first time in a tropical storm, and soon after by being knocked down by a freak tidal wave caused by a sea-bed volcanic eruption. This is something that happens just once in a lifetime in this area, and you guess who was right there when it did. I was beginning to believe we

should never have left on that Friday.

Like only last year, leaving for our annual trip to Venezuela to get out of the hurricane area. We left in a mad rush as tropical storm BRETT was approaching. The whole of Bequia thought it so funny that we sailed smack into Brett's track. The first storm on the Venezuelan coast for five hundred years! We just couldn't see the funny side. We take all catastrophes for granted now. "You guys not real, mon!"

So true.

We just happened to be in the wrong place in Venezuela when a revolution broke out, and we had gunfire, bombs and "house" arrest for five days.

And the time we got caught in a rat-trap of a marina near Caracas, with once-in-a-blue-moon swells rolling in partially destroying the northern coastline. Our guardian angel swept us out to safety by the skin of our teeth, with only the loss of some deck gear, anchors and breaking my leg.

Coming 'home' from a trip to Trinidad we hit a squall which blew out all sails, and just as we were approaching port, the en-

gine crankshaft broke, and we drifted helplessly toward Panama for a week.

It was during this last incident, hungry and depressed, that I screamed to the sharks (who seemed to increase in number from day to day), - Enough is enough! I want to buy a little house with a small rose garden and a friendly donkey. I wanna go home!

But after being saved and towed into wondrous Admiralty Bay and eating a delightful breakfast at the Pizzeria (they only serve them like that to shipwrecked sailors). I guess it was then that we first got that feeling that we were stuck for real.

We have, however, made one serious attempt to break away. After one hell of a party, with a thousand goodbyes and the Admiral blowing us farewell with a marvellous horn we thought we had slipped our mooring forever, in spite of people shouting as we sailed out..... "You'll be back!" It took us only one year to get back again. We have now given up trying to run away.

A great voyager once said, long ago, that every man, before he dropped his anchor for the last time, should cross an ocean and enter a strange, faraway enchanted harbour under a spread of sail.

This is it.

### ACCIDENT REPORT ?

Author Anonimous

Sent in by Dan Cashin

Before you go out and do that Spring Tower work think about this joke. It could happen to you.

"I am writing in response to your request for additional information for block #3 of the Accident Reporting Form. I had put "poor planning" as the cause of my accident. You said in your letter that I should explain more fully and I trust that the following detail will be sufficient..

"I am an amateur radio operator and on the day of my accident, I was working alone on the top section of my new 80-foot tower. When I had completed my work, I discovered that about 300 pounds of tools and spare hardware had accumulated topside over the course

of several trips up the tower. Rather than carry the unneeded tools and material down by hand, I decided to lower the items in a small barrel by using a pulley, which fortunately was attached to the gin pole at the top of the tower.

"Securing the rope at ground level, I went to the top of the tower and loaded the tools and material into the barrel. Then I went back to the ground and untied the rope, holding it tightly to ensure a slow descent of the 300 pounds of tools. You will note in block #11 of the Accident Reporting Form that I weigh only 155 pounds.

"Due to my surprise at being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate of speed, up the side of the tower. In the vicinity of the 40-foot level, I met the barrel coming down. This explains my fractured skull and broken collarbone. Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley.

Clifford W. Ashley

"Fortunately, by this time, I had regained my presence of mind, and was able to hold onto the rope in spite of my pain. At approximately the same time, however, the barrel of tools hit the ground and the bottom fell out of the barrel.... Devoid of the weight of the tools, the barrel now weighed approximately 20 pounds. I refer you again to my weight in block #11. As you might imagine, I began a rapid descent, down the side of the tower. In the vicinity of the 40-foot level, I met the barrel coming up. This accounts for the two fractured ankles and the lacerations of my legs and lower body.

"This encounter with the barrel slowed me enough to lessen my injuries when I fell onto the pile of tools, and, fortunately, only three vertebrae were cracked. I am sorry to report, however, that as I lay there on the tools, in pain, unable to stand, and watching the empty barrel 80 feet above me . . . I again lost my presence of mind. I let go of the rope."

Ed: Nice one Dan, can't stop laughing. Anymore, anyone, or would anyone care to draw us some cartoons?

--oOo--

"Manrope Knots were first mentioned by Brady in 1841. They were tied in manropes, which are ropes leading to either side of the gangway. The knots provide a handhold for anyone climbing the side ladder. At an early date manropes were called entering ropes, a name mentioned by Captain John Smith in 1627; for a while in the nineteenth century they were called sideropes. The Manrope Knot proper in four-strand, the strands being invariably canvas-covered and trimmed flush at the stem. When doubled, the lead is commonly followed on the lower or outer side. Generally the knot is tripled, and often it is four-ply, but I have seen the knot tied with as many as six ply on a pair of naval chest becketts...Wetjen, in *Fiddlers' Green*, says: "A man who can make a Manrope Knot, Star Knot, or Rose Knot is an object of respect" -and at sea this statement still holds true."

# Guild Supplies

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\* bulk purchases of these items available at a discount - phone for details

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