



P·A·T·T·E·R·N

ON THE
KNITTING
MACHINE

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RUTH LEE

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**PATTERN ON
THE KNITTING MACHINE**

B.T. Batsford Ltd, London

Acknowledgement

My thanks are due to all those who helped me slave over knocking the book into shape, especially my long-suffering partner, Michael Pearce, who typed all my handwritten script on to the word processor.

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Introduction

This is intended to be a working manual on techniques in patterned and decorative machine knitting, which adopts a creative approach backed by a thorough exposition of method, including detailed examples. The book assumes that the reader has some experience with the machine. It is not a text for the complete beginner, although elementary principles are outlined where this assists in explaining more elaborate methods. Many illustrative examples are provided.

It is hoped that the reader will participate and be encouraged to develop and build on these examples, and will be sufficiently inspired by them to work out new ideas of her or his own.

As for myself – I started out as a would-be fabric-print designer, but found that I was unhappy simply working with flat pattern. I wanted to be able to change the surface itself, to design with the texture and feel of the material, to raise the surface in places. Knitting seemed a natural progression, given my love for pattern and colour.

I hope I succeed in transmitting some of my enthusiasm for my work, and that the book will help you to create all the things you have perhaps considered making but lacked the confidence or the know-how to try. Have a go – you could easily become a lifelong addict.

Creative machine knitting! The very phrase conjures up experimental surfaces of knit which combine unusual applications of colour, pattern and texture using one or more techniques. Functional considerations work alongside aesthetics in designs for clothing, accessories and furnishings, or simply decorative pieces (see fig 1).

Each project will throw up problems (which hopefully you will view as challenges). Many of these you will have met and overcome before, if you are an experienced machine-knitter, but new designs naturally mean new challenges requiring that you find new solutions. The process of discovery is one of the great pleasures to be had from any creative work, and this applies as much with machine-knitting as any other field of endeavour.



Fig 1. Strip coat. Plain knit wool base with knitted-in patterned strips, using a mixture of wools, cottons, chenilles, slub and bouclé yarn.

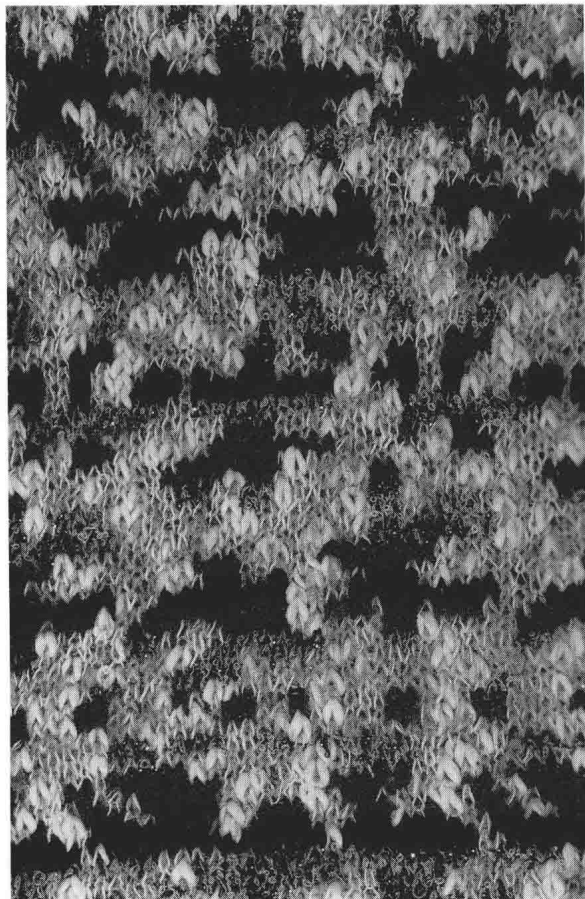


Fig 2. Double-bed Jacquard knitted over a 24-stitch repeat in a range of small scale patterns using wool, slub cotton, fine mohair mixes and industrial weight lurex.

Since the book is intended to be inspirational rather than prescriptive, it will, I hope, encourage the same pioneering approach that has sustained my enthusiasm for many years and which continues to keep the subject an exciting one for me. It should give you the confidence to try out and develop your own design ideas, and to take the problems in your stride.

This book is limited to variations on a simple knit structure consisting of one row Purl, one row Plain, and excludes experiments with more complex stitch structures (with the exception of double-bed Jacquard). Thus I have concentrated mainly on varieties of stocking-stitch, for example Intarsia and 2-colour stranded knitting, alongside Partial-knit methods (see figs 2, 3, 4, 5, 6 and 7).

The types of images and designs included in this book tend to read more clearly on knits with a simple



structure, where texture is achieved by way of contrasting yarns, such as rayon, mohair, cotton and silk, rather than elaborate stitch technique. You should be aware, though, that the use of various stitch-effects generates many more possibilities.

Such methods as Multi-colour Tuck stitch, or Knitweave in combination with patterned knit, open up many more possibilities, but are outside the scope of this book.

Some of the techniques included show ways of manipulating the surface of the knitting to produce decorative effects, such as Pleating, Appliqué, and slitted surfaces, but again the emphasis is on simple structure and surface pattern.

Throughout the book I will try to encourage the concept of the knitting-machine as being the means to an end – the tool whereby your ideas become finished pieces. Learn to control the machine and

Right Fig 3. Co-ordinating double-bed Jacquard patterns with a wide striped rib. Cotton, wool, 'Geneve' (80% acrylic 20% nylon) from Atkinson.



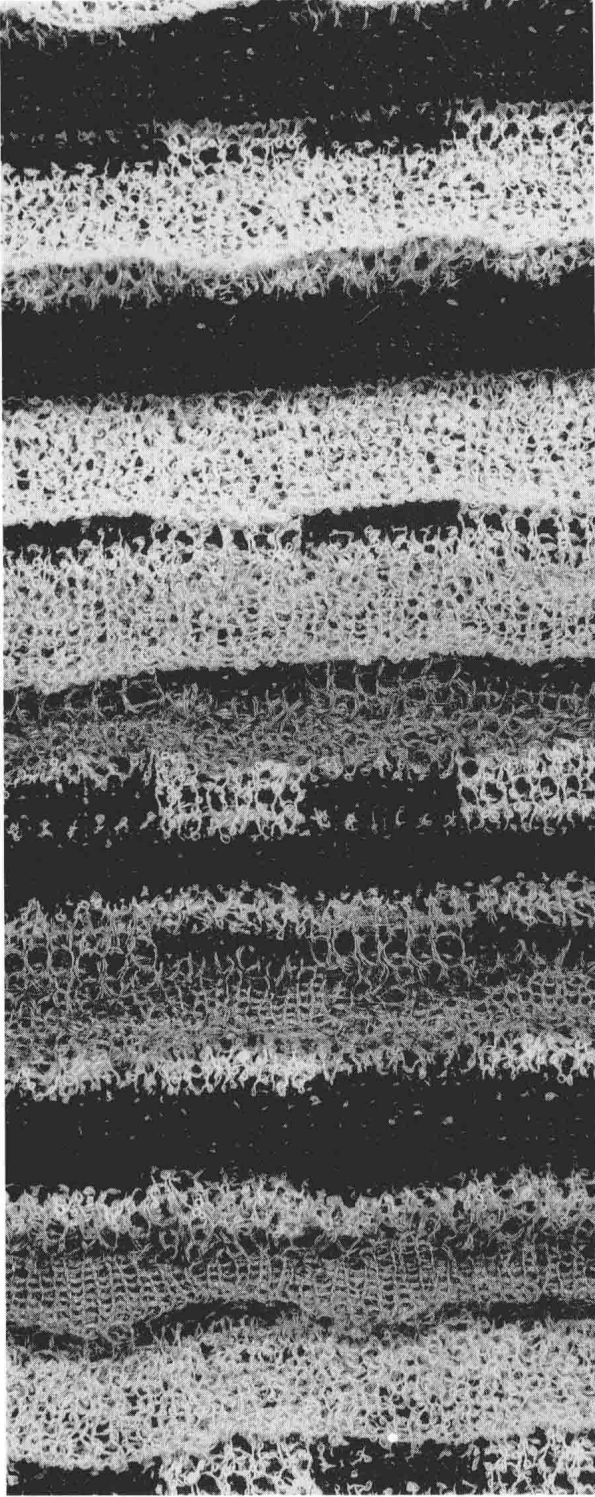


Fig 4. Ripple technique Jacquard in fine synthetic yarns.



Fig 5. Patterned (single-bed) and slitted surface with knitted-in bobbles and a plain-knit underlay (purl side facing). Chenilles, rayons, lurex, cotton mixes and wool.

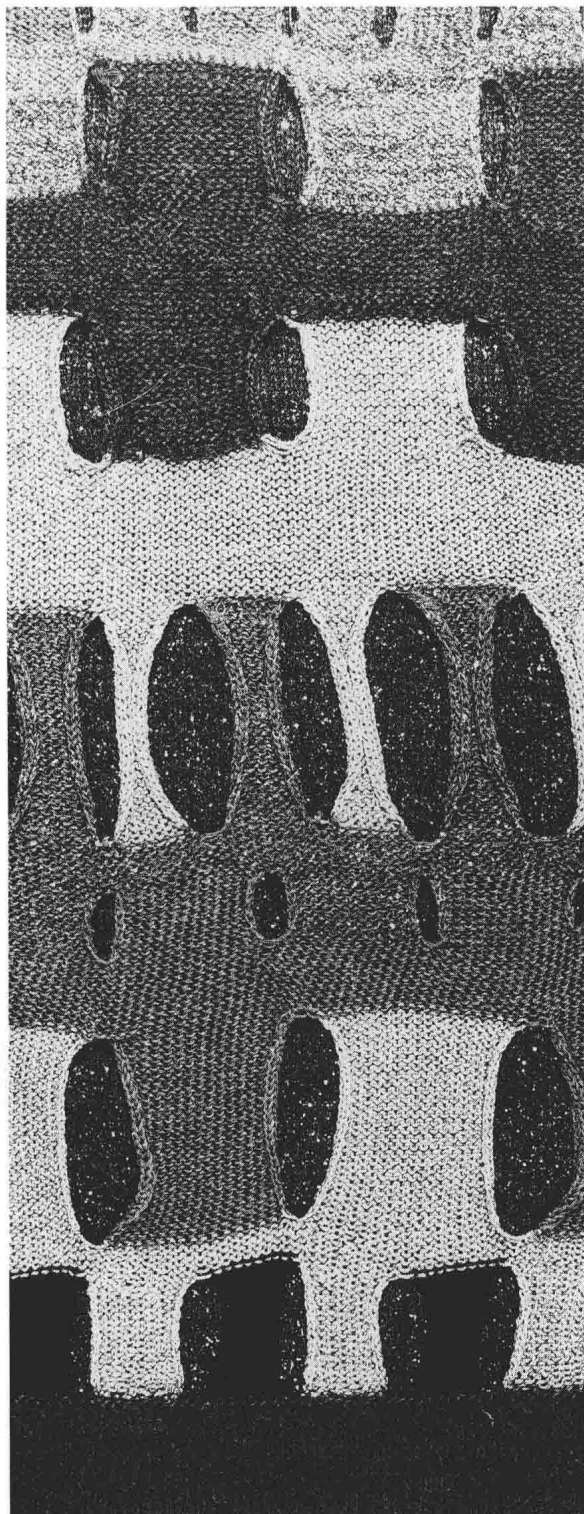


Fig 6. Plain-knit slitted surface using the purl face of the knitting, in cotton and wool.

have confidence in it and you will have overcome the first obstacle to designing and producing your own, original, work.

The more you understand the workings of your machine the easier it is to correct errors, or at least to know why a particular sample went wrong. If you feel confident that you can cope with all eventualities (and we all of us, however experienced, make mistakes) you will be much happier about trying out new ideas.

If something doesn't work out too well the first time, you will feel far less despondent if you have an idea of why the problem cropped up, and how to fix it. It may be a simple matter such as broken stitches caused by the wrong tension for a particular yarn, but if you aren't familiar with your equipment, this sort of thing can be very frustrating.

It is most important to be able to assess what to do when a piece has gone wrong. Often, time can be saved (in the long run) by scrapping the piece and starting again rather than spending fruitless hours trying to salvage a sample that has gone too far wrong for redemption.

This last point applies perhaps more with bad creative decisions than technical hitches. Even so, spending ten minutes unpicking faulty rows when you are only five minutes into the work is clearly bad practice (unless by doing so you learn something). This may be an obvious point to make, but it does happen, and experience and familiarity will stop you from falling into that particular trap.

Remember that patience, practice, confidence (and a sense of humour) are of paramount importance on the road to becoming a successful creative machine-knitter. Don't be frightened to take chances, since the worst thing that can happen is that you fail. You will at least learn from this and be more likely to succeed the next time. Let your imagination loose and you will begin to see results.

Don't let your knitting machine inhibit or intimidate you (perhaps easier said than done). There will come a time when you will be in control of it rather than vice-versa. While you should have respect for the equipment, don't have too timid an approach to using it. These machines are very robust and unless you are really heavy-handed or extremely careless the worst you will do is break or bend a few needles.

However, here is a cautionary tale. Some years ago during a very busy period producing rushed orders, I failed to check that the needle-bed extension-rail was fitted on my machine (I was using a Brother KH830 at the time). A hasty and ill-considered attempt to park the carriage on the non-existent rail resulted in its

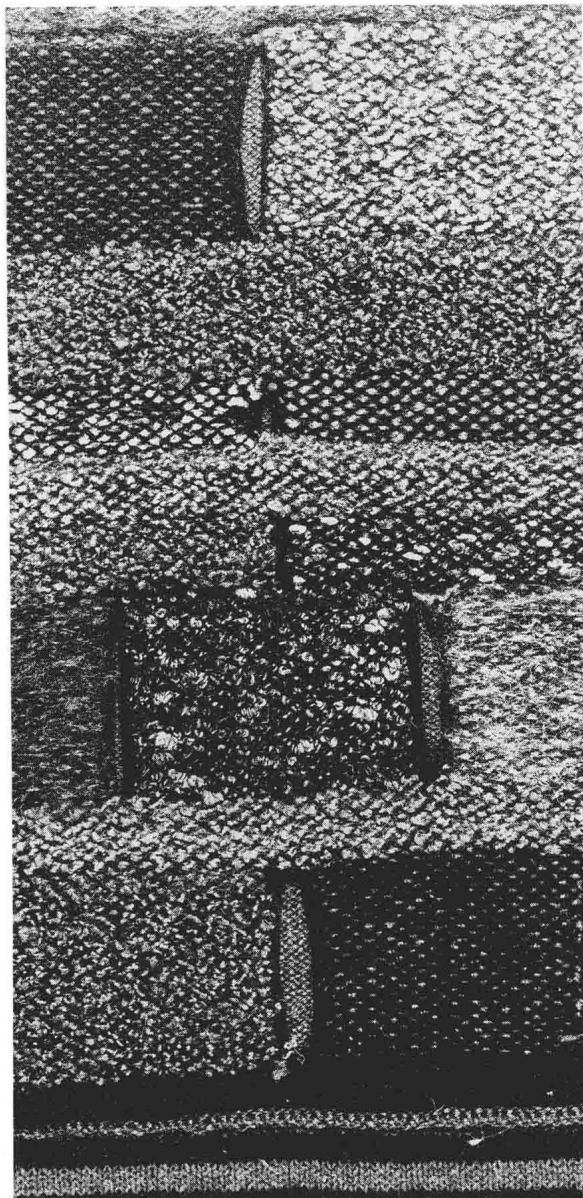


Fig 7. Knitweave slits, using wools, boucles and mohair.

describing a trajectory through the air (which rapidly turned blue) and meeting a stone flagged floor.

The expensive consequence of this incident was a panic visit to a repair-shop and a missed deadline. Carpeting was purchased soon afterwards.

Such happenings generally occur as a result of carelessness, forgetfulness and/or trying to do too many things at once. Make a check on all the important aspects of your equipment and workbench on a daily basis, and keep things tidy. For example

avoid leaving claw-weights and tools behind the machine close to the yarn cones – they will tangle with the yarn, which will then pull tight and break.

Try to anticipate in your mind how calamities such as the one described above may come about, and take avoiding action. Don't leave odd needles in the forward position where they can tear clothes or cause personal injury to yourself or others.

Generally the more experienced and practical you are the less likely you are to be inhibited by your machine. You soon realise if you are trying to do things that the machine cannot safely cope with.

This has always been my philosophy toward machine knitting. Disaster is occasionally snatched from the jaws of success, as it were, but this can be regarded as part of the adventure, and a provider of valuable experience. Taking chances, and practice, will help you to evaluate why one sample has worked while another hasn't.

Experience will also tell you whether a failed idea can be improved, or if you should discard it and move on to something else, or if a design idea has been developed as far as it can be – a conclusion which is often far from obvious. Perhaps the sample in question is unsuitable for the present purpose from a design point of view, but could work in a different context, or be a starting point for another project. To deal competently with decisions of this nature, you must develop the artist in yourself.

You may find it worthwhile, as I do, to keep the majority of your samples for future reference. Note down details such as tension, method used, number of stitches, type of yarn and its supplier, and any other unusual details you think might be useful.

Write the details in a notebook together with a reference number, then write the number on a cardboard tie-on label and attach this to the sample. Then you can put the samples all together in a box or bag and keep the notes themselves somewhere safe. It can be infuriating to be inspired by an old sample and to have no idea how to go about reproducing it.

It is also worth building up reference material from which you can obtain inspiration either for producing your own ideas, or adapting existing patterns.

Collect magazine cut-outs, colour charts (from paint shops or artists' suppliers), postcards, and snips of fabric, yarn or paper.

Colour is one of the most important ingredients of a successful design. The same pattern can take on quite different characteristics, depending upon the combination of colours being used – for example