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Patent It Yourself

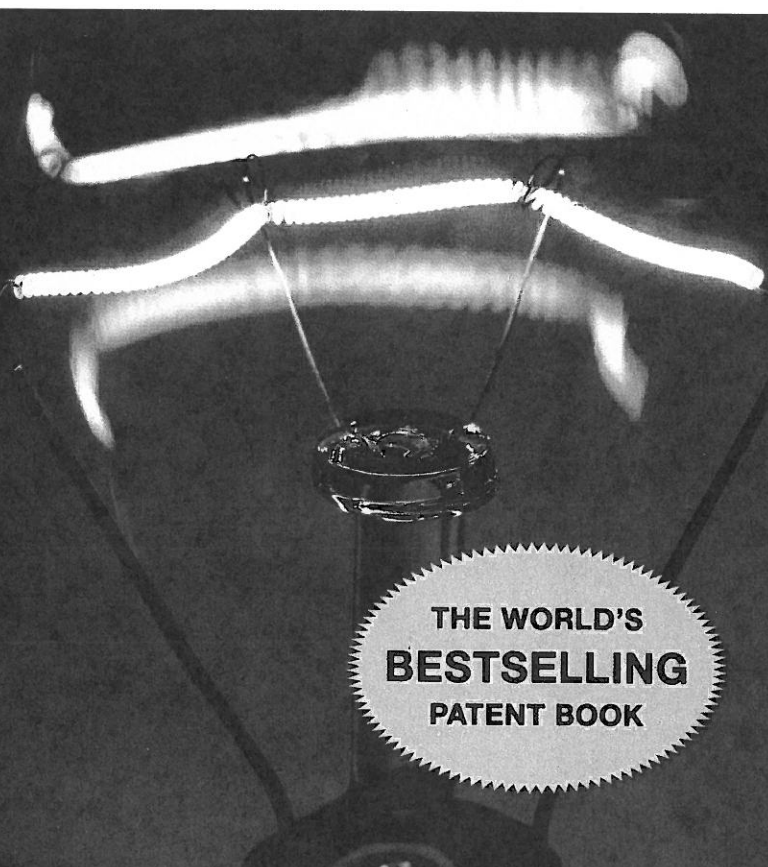
- Perform your own patent search
- Understand the latest patent laws
- Prepare and file your patent application

**Your Step-by-Step Guide to
Filing at the U.S. Patent Office**

*"For any entrepreneur who's
inventing something, it's the
one book you should read."*

NICK WOODMAN,
FOUNDER & CEO OF GOPRO

PATENT ATTORNEYS DAVID PRESSMAN
& THOMAS J. TUYTSCHAEVERS



THE WORLD'S
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PATENT BOOK

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Search and You May Find

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Inventor's Commandment 8

You should make (or have made) a thorough patentability search of your invention before you decide whether to file a patent application, and you should not file a patent application unless you believe your invention has—in addition to strong commercial potential—one or more novel features over the prior art which you believe the PTO will consider to be nonobvious.

A patentability search is a review of the prior art surrounding your invention. You are looking for a pre-existing invention, device, or publication that would demonstrate that your invention is *not* new or that it is obvious to others in the field. In other words, you're looking for evidence that could prevent you from obtaining a patent. In this way, a patentability search is a paradox, because you're looking for something you hope you won't find! The Patent and Trademark Office (PTO) doesn't require a patentability search, but patent practitioners recommend that all inventors make (or have made) such a search prior to deciding whether to file a patent application.

A. Why Make a Patentability Search?

Here are 14 reasons for making a patentability search.

1. To Determine Whether You Can Get a Patent

The main reason for making a patentability search of your invention is to discover if the PTO will be likely to grant you a patent on your invention. If your search indicates that your invention is likely to qualify for a patent, you can go ahead with your development, marketing, and other work on the invention with far more confidence that your efforts will eventually produce positive results.

If your patentability search indicates that a patent isn't likely to be granted, think about whether to proceed. Most manufacturers won't invest in tooling, producing, and marketing something that their

competition can freely copy, and perhaps even sell at a lower cost. (Though there are exceptions as explained in Chapter 7.)

2. To Avoid Needless Expenditures and Work

It makes sense to do a relatively small amount of work—a patentability search—entailing a modest expenditure in order to gain useful information that may well allow you to avoid wasting considerable time and/or spending a relatively large amount of money preparing a patent application.

3. To Provide Background to Facilitate Preparation of Your Patent Application

You'll find it easier to prepare a patent application if you make a patentability search. A search will bring out prior-art references (prior publications including patents and literature) in the field of your invention. After reading these, you're likely to learn much valuable background information that will make the task of writing your patent application easier. Patent attorneys almost always routinely review some sample patents from the field of an invention before they begin preparation of a patent application, in order to give them a "feel for the art."

4. To Know Whether to Describe and Draw Components

A patent application must contain a detailed description of your invention, in sufficient detail to enable a person with ordinary skill in the "art" involved to make and use it. If your invention has certain components with which you aren't familiar, you won't have to take the trouble to draw and describe these in detail if you find them already described in prior-art publications, including patents.

5. To Provide More Information About Operability and Design

When you make a search, you will almost always find patents in the field of your invention, possibly on inventions similar to yours. A reading of these

patents will give you valuable technical information about your invention, possibly suggesting ways to make it work better and improve its design, or possibly indicating technical approaches that you should avoid.

6. To Obtain Commercial Information

The patents and other references that you uncover in your search will give you valuable commercial information about similar developments to your invention. For instance, suppose you see many patents on inventions that produce the same result as yours, and you know from your familiarity with the field that none of these has attained commercial success. In this event, you might want to reconsider the wisdom of pushing ahead with your own invention. Or you might conclude that you can do better, because the prior inventions were not commercially exploited properly or because they did not operate properly due to lack of proper components, proper materials, excessive costs, etc.

7. To Obtain Possible Express Proof of Unobviousness

Sometimes a search will uncover references that actually “teach away” from your invention—for example, by suggesting that your approach won’t work. You can cite such a reference to the PTO to help convince the examiner to regard your invention as unobvious. For instance, suppose you’ve invented a bicycle frame made of a new carbon-fiber alloy that makes your bike far lighter and stronger than any previously made. Ordinarily, the substitution of a known alternative material (here a carbon-fiber alloy for steel) would not be patentable, since the substitution would not provide any *unexpected* results or advantages. But suppose during your search you find a prior-art reference (such as an article in *Metallurgic Times*) that states that carbon-fiber should not be used for bicycle frames because it cannot absorb shocks. If you find that such alloys can be used successfully, you can cite this reference to the PTO to show that you’ve turned a past failure into success. Thus you’ll have express, positive proof that your invention provides unexpected results and is unobvious.

8. To Define Around the Prior Art to Facilitate Prosecution

By familiarizing yourself with the prior art, you’ll be able to tailor and define the general thrust, structure, and advantages of your patent application around such art and its deficiencies. This will save you work and arm you with the proper terminology and support that you may need later in the “prosecution” stage (that is, the stage where you actually try to obtain a patent from the PTO).

EXAMPLE: LeRoy invented a sturdy but edible, baked scoop for dips, including salsa. His search turned up a patent to Minerva on a similarly shaped cereal product, but which was too fragile for scooping dips. As a result of the knowledge gleaned from his search, LeRoy was able to direct his patent application to the novelty of his scoops by knocking the fragility of Minerva’s product and explaining and stressing the strength of his scoops with actual (quantitative) performance figures. This enabled him to distinguish and “sell” his invention over Minerva’s product and get a patent.

9. To Learn Your Invention’s Novel Features so as to Expedite Prosecution

After making a thorough search of the prior art, you’ll be able to find out which of your invention’s features are novel, enabling you to recite, stress, and direct your patent application to all of those features and advantages. Also, you can tailor your claims to such novel features so as to preclude an early “final action,” expedite the ultimate allowance of your case, and avoid the need to narrow the claims.

10. To Facilitate Licensing or Sale of Your Invention

When you attempt to sell or license your invention rights, your potential licensees will want to know if your patent application will be likely to get through the PTO. You can answer their concern, at least partially, by showing them your search results,

providing some confidence in your invention and possibly speeding up and facilitating negotiations.

11. To Find Out What You've Really Invented

Many inventors don't realize or understand exactly what they've invented until they see a search report. Indeed, many inventors get a severe case of "search shock" when their "major advance" turns out to be relatively minor. If this happens, don't give up on your brainchild, since your minor advance may be extremely valuable and vital. On the other hand, occasionally an inventor, believing that the invention is a relatively small advance and that its basic broad idea must have already been invented, is very pleased and surprised to learn from the search results that the invention's a gold mine instead of a nugget!

12. To Get a Stronger Patent

A PTO examiner will usually make a better search than you or a professional searcher will be able to do. Nevertheless, some examiners, at certain times, may miss a highly relevant reference. If anyone uncovers such a reference later, after you get your patent, and brings this reference to the attention of the PTO or any court, it may cast a cloud over, or even invalidate, your patent. However, if you find such a reference in your search, you can (and must) make a record of it in the PTO's file of your patent application, tailor your claims around it, and avoid any potential harm it may cause you later, thus making your patent stronger and less vulnerable.

13. To Get Your Patent Application Examined Ahead of Turn

It's not always a wise idea to get your patent application expedited (see Chapter 10). But, if you really need to speed things up, you'll be entitled to get it examined ahead of its turn if you've made a preexamination search.

14. To Determine If Your Invention Will Infringe Any In-Force Patents

You may wish to know if your invention—if made, used, sold, offered for sale, or imported—will infringe

any existing patents, especially if you're considering manufacturing the invention. A search and study of the claims of all relevant in-force patents will reveal this.

B. When Not to Search

Despite our inventor's commandment about doing a patent search prior to filing, there are at least two situations where you can "skip the search."

If you are dealing in a very new or arcane field with which you're very familiar, obviously a search is highly unlikely to be profitable. For example, if you're a biotech engineer who reads all the journals and patents to keep abreast of the state of the art, the newness of your field makes it highly unlikely that you will find any early "prior art." Or, if you make semiconductors and have up-to-the-minute knowledge of all known transistor-diffusion processes, and you come up with a breakthrough transistor-diffusion process, a search will probably not produce any reference showing your idea. Before deciding not to search, however, you should be reasonably certain that you or someone else with whom you are in contact knows all there is to know about the field in question, and that you are fairly confident there is no obscure reference that shows your invention.

In addition, if you've made an improvement to an earlier invention that you've already searched, and you feel the search also covered your improvement, there's obviously no need to make a second search.



TIP

Designs. Generally it's not worth searching design inventions, since the cost and time required to make the search is greater than the time and cost to prepare a design patent application. However, if you believe that some of the reasons expressed, above, are relevant to your situation, you should make a search of your design. Also, you must search your design invention if you want to petition to have your design application examined right away on the "Rocket Docket." (See Chapter 10.)

Common Misconception: There's no reason to make a patentability search prior to filing a patent application because the PTO will make one anyway.

Fact: Even though the PTO will make a search, there are many good reasons (see the 14 reasons, above) to make a search before filing.

C. The Two Ways to Make a Patentability Search

Basically, there are two ways to get your search done: have someone do it for you or do it yourself. If you're a conscientious worker with the necessary free time, and you have access to a search facility (or adequate computer search capability), doing the search yourself is the best way to ensure that it is done thoroughly. This will also save you money and enable you to accumulate valuable information.

However, you may have very good reasons for hiring a professional searcher—for example, you live far from any search facility or you don't have enough time. Also, there's the procrastination factor: half the time the only way some of us will ever get a job done, even though we're capable of doing it, is to turn it over to a pro. If for geographical or other reasons you choose to hire a searcher, you'll find advice on choosing one below. Even if you do use a searcher, read through the instructions on do-it-yourself searching in order to understand what you're paying for and to be able to recognize whether the searcher has done a thorough job.

It's generally not a wise idea to rely on the computer completely, however, because computer searches can miss valuable prior art unless you use the same search words that are in the relevant prior patents. If you do the patentability search yourself, there are three subpossibilities:

1. You can search using the EAST computer system in the PTO in Alexandria, Virginia (definitely the best database)
2. You can do an online search at home or at work, alone or combined with a professional search, or
3. You can do a PubWEST or online search in a local Patent and Trademark Resource Center.

Further, wherever you search, there are two types of searches that you can make:

- **By Classification:** You can make a search of all patents in a particular class and subclass (classification search).
- **By Keyword:** You can also search for keyword combinations in all patents (keyword search).

Paper Patents Are No Longer Searchable

In the past, inventors and searchers were able to walk into the PTO and search paper patents, either in the public search room or the examining division. Nowadays, the computer has supplanted paper patents for search purposes.

D. The Quality of a Patent Search Can Vary

Your patentability search can never be perfect because there is no way to search unpublished pending patent applications. (A patent application that is based on an RPA or PPA that was filed before your date of invention is valid prior art against your application, even if the patent issues after you file.)

Other reasons why your search may not be perfect are:

- some prior-art references can be missing from the database you're searching
- most patent computer searches do not contain foreign, nonpatent, or exotic references (such as theses, service manuals, magazines, textbooks, etc.)
- very recently issued patents may not have been placed in the computer's database yet
- a relevant reference (patent or nonpatent) may be described using terms that you would not use, or even think of, or
- your invention may have either been used publicly (without being published) before your invention, or it may have been previously invented by someone else who did not abandon, suppress, or conceal it so that it has not been filed in any database.

E. How to Hire a Patent Professional

Here are some suggestions for how to find and work with a patent professional.

1. Lay Patent Searchers

A lay patent searcher is not licensed to represent inventors before the PTO, (that is because they are usually engineers but not patent agents or patent attorneys). Lay searchers, as well as attorney-agent patent searchers, can be located via online search. Others advertise in periodicals, such as the *Journal of the Patent and Trademark Office Society*, a publication for patent professionals edited and published by a private association of patent examiners, or *Inventor's Digest*. Although there are many good lay searchers, attorneys and agents understand the concept of nonobviousness better and thus dig in more places than might at first appear necessary. However, lay searchers charge about half of what most attorneys and agents charge. Nevertheless, before hiring *any* searcher, find out about the searcher's charges, technical background, on-the-job experience, usual amount of time spent on a search, and where the searcher searches (in the PTO's main search room in the examining division and/or using the EAST system). Most importantly, ask for the names of some clients, preferably in your city, so that you can check with them. Lay searchers do not have to be licensed by any governmental agency, so you should exercise more care in selecting one and you should be aware that they're not allowed to express opinions on patentability.

2. Patent Agents

A "patent agent" is an individual with technical training (generally an undergraduate degree in engineering or science) who is licensed by the PTO to prepare and prosecute patent applications. A patent agent can conduct a patent search and is authorized to express an opinion on patentability, but cannot represent you in court, cannot handle trademarks, and cannot handle licensing or infringement suits.

How to Use a Lawyer or Agent

Here are some tips:

- Make sure the practitioner sends you a copy of every document (letter or official paper) that they generate for you or receive on your behalf.
- Save every paper you receive from the practitioner in a file, keeping official papers, bills, and letters separate.
- Make sure you understand everything the practitioner does or proposes to do for you and why the practitioner is taking this course of action. Almost every possible action is explained in this book, but if not, ask the practitioner to explain it to you.
- Find out in advance the cost of every task the practitioner intends to perform for you and make sure the practitioner understands that you need to approve each and every fee in advance. Have the practitioner agree to obtain your advance approval if any fee will be exceeded. You don't want any open billing. Also make sure the practitioner agrees to send you bills with disbursements itemized and kept separate from the practitioner's fees and that the bills state the basis (time or fixed rate) for the practitioner's fees.
- If you can't communicate with the practitioner, feel that the practitioner is not acting competently, ethically, or honestly, or don't understand what the practitioner is doing and are unable to obtain an adequate explanation, find another practitioner and dismiss the old practitioner. You should have obtained and kept a copy of your papers, but even if you haven't, you are entitled to obtain a copy of your file. In most states you are entitled to the copy without charge, even if you owe the attorney money. Legally, the file belongs to you. Also you are entitled to dismiss your attorney at any time (with rare exceptions).

Although many agents will serve you better, all other things being equal, use an attorney rather than an agent for searching (and patent application work), since most patent attorneys have experience in licensing and litigation which will usually lead them to make wider and stronger searches for possible use

in adversarial situations. However, always consider the competence of the individual, how much time he or she will spend with you, and how well you get along.

3. Patent Attorneys

A “patent attorney” or “patent lawyer” is an individual with technical training (generally an undergraduate degree in engineering or science) who is licensed to practice both by the PTO and the attorney-licensing authority (such as the state bar, state supreme court, etc.) of at least one state. A “general” lawyer licensed to practice in one or more states, but not before the PTO, can handle copyrights and trademarks but is not authorized to prepare patent applications or use the title “patent attorney.” An intellectual property attorney handles trademarks and copyrights and may or may not be licensed by the PTO to prepare and file patent applications.

4. Finding Patent Agents and Attorneys

All patent agents and attorneys registered to practice before the PTO are listed on the PTO’s website at <https://oedci.uspto.gov>. For patent search purposes, you will want to find an attorney or agent in the Alexandria, Virginia, area (a suburb of Washington, DC). Most patent attorneys and agents who do searching in the PTO can be found in the District of Columbia section, or the Virginia section of the PTO’s attorney directory under zip codes 22202 or 22301–22336. Pick one or more of these and then call or write to say you want a search made in a particular field. (Generally, hiring an attorney in your locality to do the search is a very inefficient and costly way to do the job, because the attorney or agent will have to hire an associate in or travel to Alexandria to make the search for you.)

Finding a good patent professional often involves more than checking a list. The best way is by personal referral. Another way to check an attorney or agent is to look at the patents they’ve prepared. You can find these online on the PTO site by entering the attorney’s name and reading some of the recent patents. If you do find someone who seems good, make an appointment to discuss the broad outlines of your problem. Ask what undergraduate degree the attorney has (al-

most all have undergraduate degrees in engineering or a science); you don’t want to use a mechanical engineer to handle a complex computer circuit.

Your next question should be, “Will the professional help you help yourself or demand a traditional attorney-client relationship (attorney does it all and you pay for it)?” Many corporate-employed and retired patent professionals will be delighted to help you with your search, preparation, and/or prosecution of your patent application. Using this approach, you can do much of the work yourself and have the professional provide help where needed at a reasonable cost.

How to Find “Discount” Patent Attorneys and Agents

Active patent professionals (attorneys and agents) are either in private practice (a law firm or solo practice) or employed by a corporation or the government. Most patent professionals in private practice charge about \$100 to \$600 an hour. But many corporate-employed or semiretired patent professionals also have private clients and charge considerably less than their downtown counterparts. If you want or ever need to consult a local patent professional, you’ll save money by using one of these “discount” patent professionals; their services are usually just as good or better than those of the full-priced law firm attorneys. Also, since they have much less overhead (rent, books, secretaries), they’ll be more generous with their time (except that patent professionals employed by the federal government are not allowed to represent private clients). Look in the geographical region listing of PTO’s attorney directory (<https://oedci.uspto.gov>) or search by zip code for corporate-employed or retired (but still licensed) patent professionals in your area.

When it comes to fees, you should always work these out in advance. Some patent professionals charge a flat fee for searches (and also for patent applications and amendments); others charge by the hour. If you plan to do much of the work yourself, you’ll want hourly billing. If you do agree to hourly billing, be sure to first obtain an estimate of the maximum number of hours and an agreement to

notify you in advance if this will be exceeded. Many patent attorneys are used to corporate clients who use an open-ended billing arrangement—that is, they bill by the hour without providing any limit or flat fee arrangement. With this system, you can quickly become liable for far more than you may want to spend. Also, be sure it's clear who will pay for other costs associated with prosecuting a patent, such as copies, postage, drafting, filing fees, etc.

When you visit a patent attorney or agent, remember that they're not an oracle of knowledge: Don't expect to be able to lay a prototype or sketch of your invention on their desk and say, "What do you think of this?" and have them instantly tell you its commercial value and give you an opinion on patentability. First, they usually are not qualified to do a commercial evaluation. Second, they can't give you an opinion on patentability without making and analyzing a search.

F. How to Prepare Your Searcher

You'll want to use your patent searcher to maximum efficiency. Do this by sending your searcher easily understandable drawings (they can be informal sketches as long as they are clear) with a clear and complete description of your invention and the drawings. Be sure to disclose all embodiments, variations, and ramifications so that these will be searched. You won't compromise any trade-secret status of your invention (or start the one-year clock running) by such a letter since by law it's considered a confidential communication. If you wish any type of particular emphasis applied to any aspect of your search, be sure to inform the searcher of this fact. If your notebook record of your invention or your invention disclosure is clear enough, you can merely send the searcher a copy. Fig. 6A is an example of a proper search request letter from an inventor and Figs. 6B (a, b, c) are copies of the attachments to the search request letter of Fig. 6A.

You don't need to have a patent agent or a patent attorney sign a Keep-Confidential Agreement, because registered (PTO-licensed) patent professionals are strictly bound by the PTO's rules to keep all client communications confidential. However, if you feel insecure, or you are using a layperson to search, you

certainly can ask your searcher to sign Form 3-1. In any case, you should always keep a "paper trail" of all disclosures you make to anyone.

G. Analyzing the Search Report

After you send out your search request, the searcher will generally take several weeks to perform the patentability search, obtain copies of the patents and other references that the searcher feels are relevant, and report back. Most search reports have four parts:

1. A description of your invention provided by the searcher to assure you that the searcher has understood your invention and to indicate exactly what has been searched.
2. A list of the patents and other references discovered during the search.
3. A brief discussion of the cited patents and other references, pointing out the relevant parts of each.
4. A list of the classes, subclasses, or keywords searched and the examiners consulted, if any.

The searcher will enclose copies of the references (usually U.S. patents, but possibly also foreign patents, magazine articles, etc.) cited in the search report and enclose a bill. Most searchers charge separately for the search, the reference copies, and the postage. If you've paid the searcher a retainer, you should be sent a refund unless your retainer was insufficient. In this case, you'll receive a bill for the balance you owe.

EXAMPLES:

- Fig. 6C is an example of a typical, competently done search report sent by Samuel Searcher, Esq., in response to Millie Inventress's letter of Fig. 6A.
- Fig. 6D(a) is a copy of page 1 (the drawing) of the Gabel patent cited in the search report.
- Fig. 6D(b) is a copy of page 2 of Gabel (the first page of Gabel's specification).
- Fig. 6D(c) is a copy of page 1 of the Le Sueur patent cited in the search report.

You should now read the searcher's report and the references carefully. Then, determine whether your invention is patentable over the references cited in the search report. Let's use Millie's search report as an example of how to do this.

Millie Inventress
1901 JFK Boulevard
Philadelphia, PA 19103

2016 Jan 22
Samuel Searcher, Esq.
2001 Jefferson Davis Highway
Arlington, VA 22202

Patentability Search: Inventress: Napkin-Shaping Ring

Dear Mr. Searcher:

As we discussed on the phone yesterday, you were highly recommended to me as an excellent searcher by Jacob Potofsky, Esq., who is a general attorney here and a cousin of my friend, Shirley Jaschik. You said that you would be able to make a full patentability search on my above invention, including an examiner consultation and a search in the examiner's files to cover foreign and nonpatent references, for \$1,000, including patent copies and postage. I have enclosed this amount as full payment in advance, per your request. You said that you would mail the search report (without an opinion on patentability) and references to me within three weeks from the date you receive this letter.

Enclosed are three sheets of drawings from my notebook (I have properly signed, witnessed, and dated records elsewhere); these sheets clearly illustrate my napkin-shaping ring invention. As you can see from the prior-art Figs 1 (A and B), previous napkin rings were simple affairs, designed merely to hold a previously rolled or folded napkin in a simple shape. In contrast, the napkin ring of my invention, shown in Fig 2, and made of metal or plastic, has a heart-shaped outer member 12, an inner leg 14, and two curved-back arms 16. As shown in Fig 3, it is used by introducing a corner 8 of a cloth napkin 10 between an end 4 of leg 4 and the adjacent portion of outer member 12. When napkin 10 is pulled partially through the ring, as indicated in Fig 4, it will be forced to assume the shape of the space between arms 16 and outer portion 12, as indicated.

Thus my napkin-shaping-and-holding ring can be used to make a napkin have an attractive, graceful shape when it is laid flat and placed adjacent to a place setting, as indicated in Fig 5. The extending portion of the napkin can also be folded up and around, as indicated in Fig 6-A, so that the napkin and its ring can be stood upright.

In addition to the specific shape shown, you should of course search the broader concept of my invention, namely a ring-shaped outer member with an inwardly extending tongue or leg that can be used to shape napkins pulled partially through the structure. I believe that I have provided you with sufficient information to fully understand the structure and workings of my invention so that you can make a search, but if any further information is needed, please don't hesitate to call me.

I understand that you will, in accordance with the ethics of your profession, keep all details of my invention strictly confidential, except to consult an examiner.

Most sincerely,

Millie Inventress

Millie Inventress (215-776-3960)

Encs.: \$1,000 check, 3 sheets of drawings

(My file: :Search.ltr)

Fig. 6A—Inventor's Search Request Letter to Patent Searcher

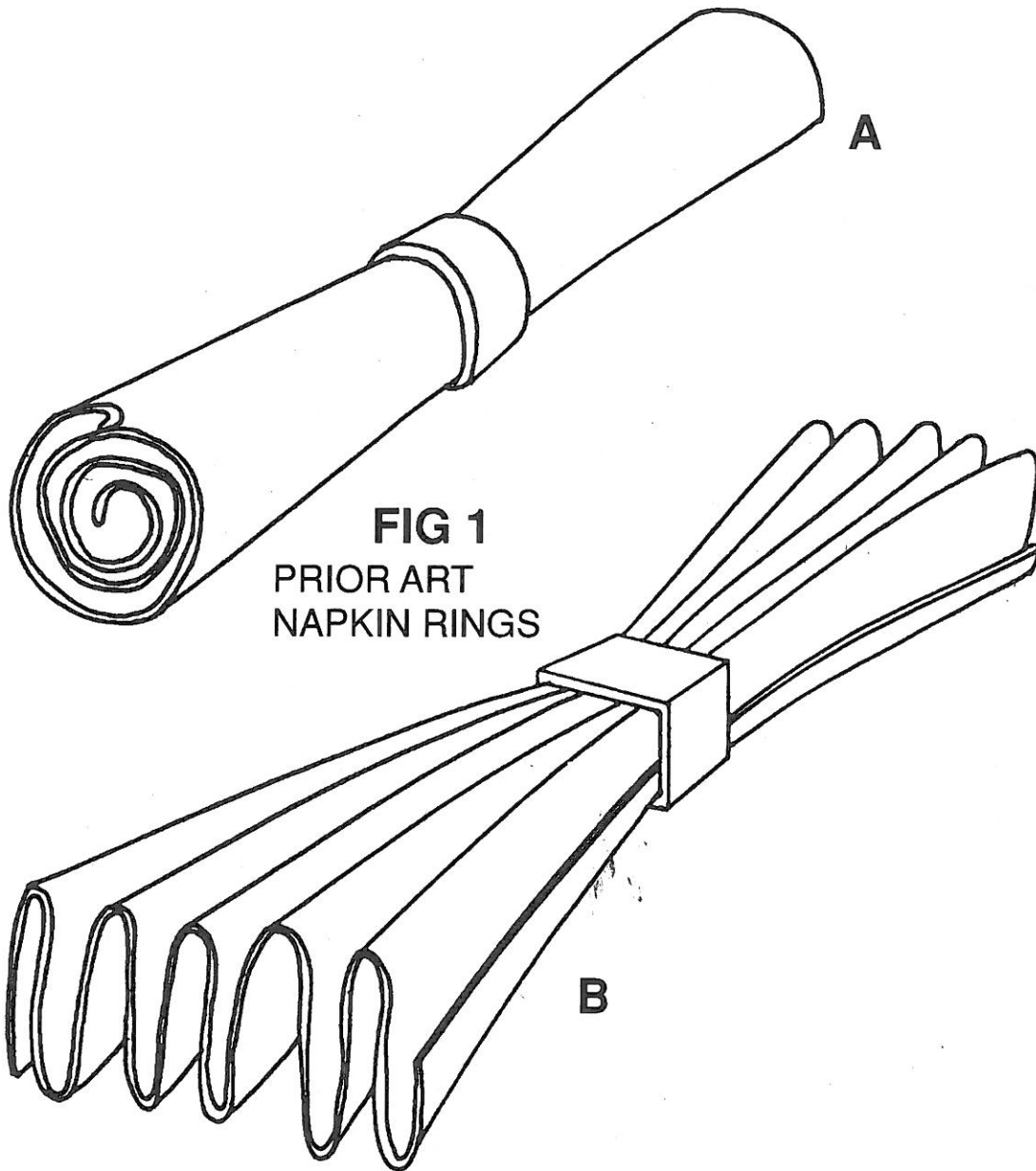


FIG 2
CIRCULAR SHAPING
RING

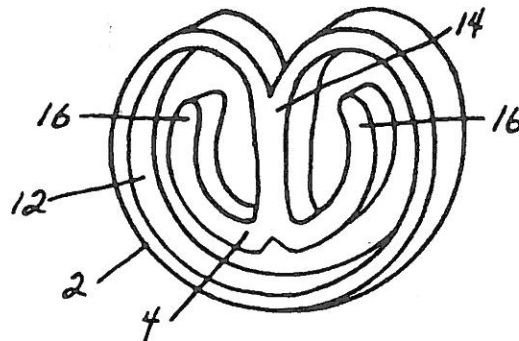


Fig. 6B(a)—Drawing of Invention, Part a

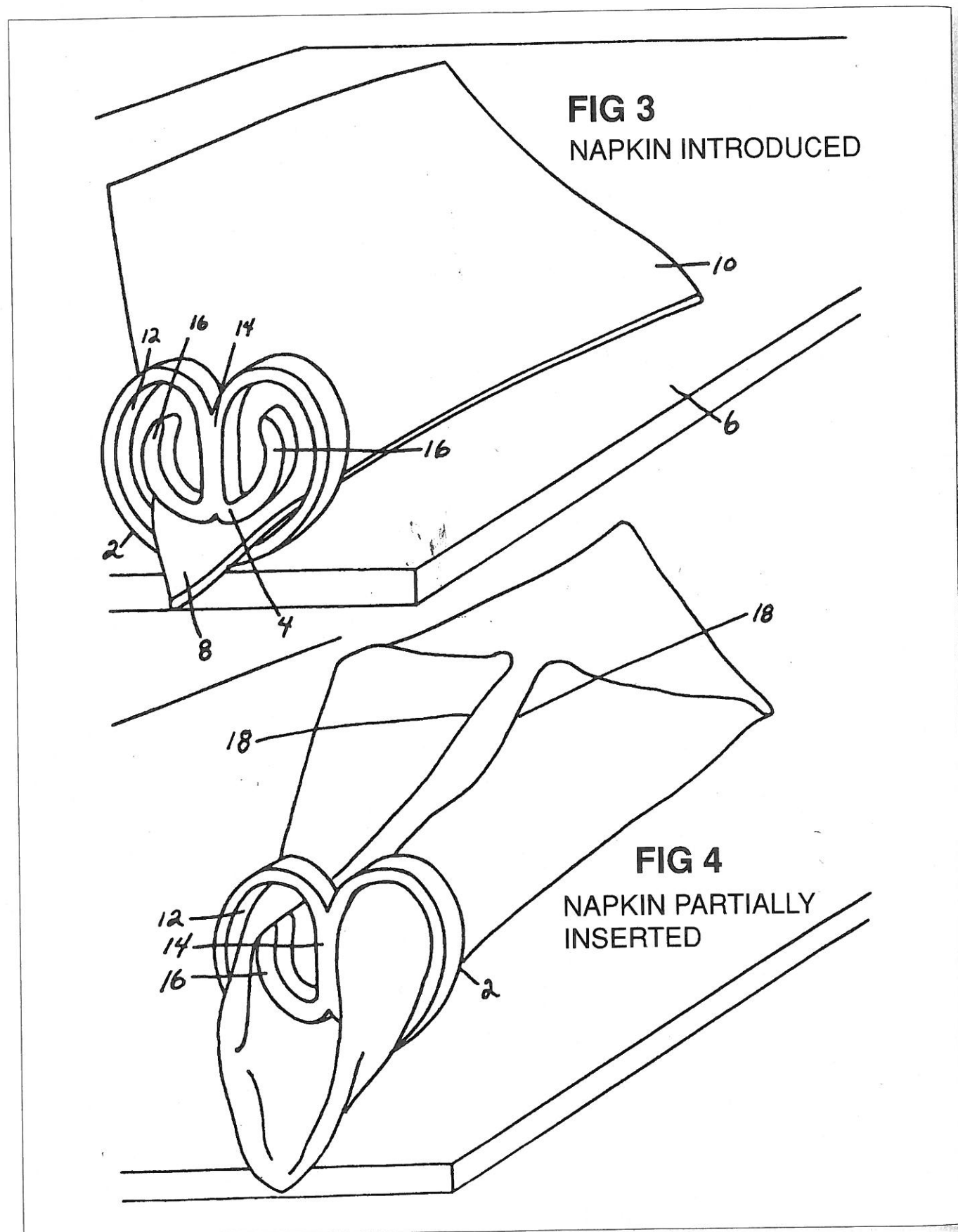


Fig. 6B(b)—Drawing of Invention, Part b

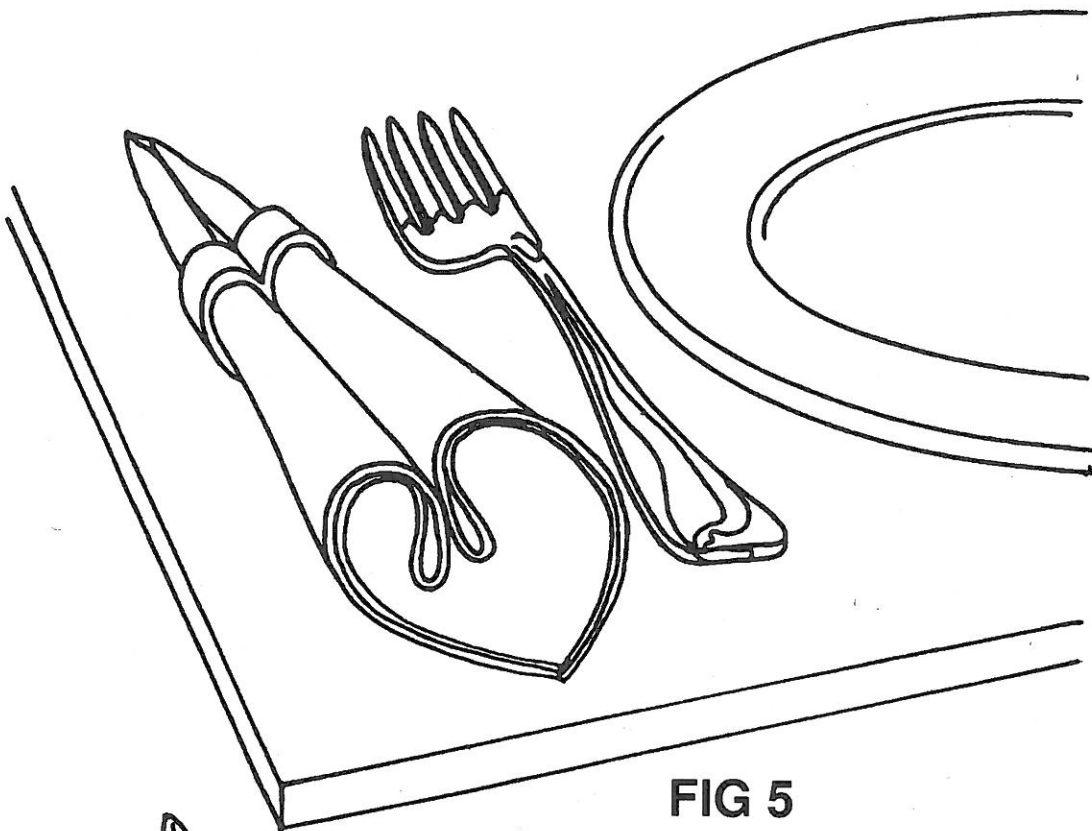


FIG 5
NAPKIN FULLY INSERTED

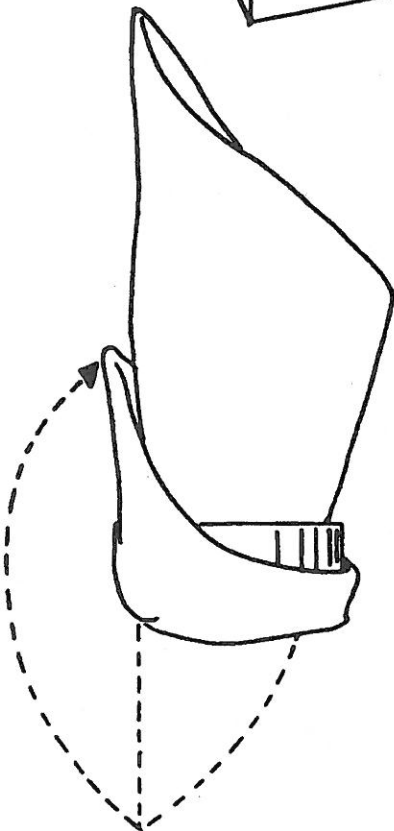


FIG 6A
TIP FOLDED UP AROUND
RING-SIDE VIEW

SAMUEL SEARCHER
 Patent Attorney
 2001 Jefferson Davis Highway
 Arlington, VA 22202
 703-521-3210
 2016 Feb 21

Ms. Millie Inventress
 1901 JFK Boulevard
 Philadelphia, PA 19103

Search Report: Inventress: Napkin-Shaping Ring

Dear Ms. Inventress:

In response to your letter of Jan. 22, I have made a patentability search of your above invention, a napkin-shaping ring comprising an outer portion with an inwardly extending leg and flared-back arms at the end of the leg. I have also searched the broader concept of an annular member with an inward cantilevered leg for shaping a napkin that is drawn therethrough. My bill for \$900, the total cost of this search, including the references and postage, is enclosed and is marked "Paid"; I thank you for your check and enclose a refund of \$100.

I searched your invention in the following classes and subclasses in the actual examining divisions: 40/21, 40/142, D44/20, and 24/8. In addition, I consulted Examiner John Hayness in Group Art Unit 353 regarding this invention. Otherwise, I kept your invention strictly confidential. In my search, I thought the following references (all U.S. Patents) were most relevant, and I enclose a copy of each: **Bergmann**, 705,196 (1902); **Gabel**, 1,771,328 (1930); **Hypps**, 3,235,880 (1966); and **Le Sueur**, 3,965,591 (1976).

Bergmann shows a handkerchief holder that comprises a simple coiled ring with wavy portions.

Gabel is most relevant; she shows a curtain folder comprising a folded metal device through which a curtain (already partially folded) is inserted and then pulled through and ironed at the exit end.

Hypps shows a necktie and holding device.

Le Sueur shows a napkin ring with magnetically attachable names.

I could not find any napkin-shaping devices as such and Examiner Hayness was not aware of any either. However, be sure to consider the Gabel patent carefully, as it appears to perform a somewhat similar function, albeit for curtains.

It was my pleasure to serve you. I wish you the best of success with your invention. Please don't hesitate to call if you have any questions.

Most sincerely,

Samuel Searcher

Samuel Searcher

Encs: \$100 Check, Bill, and References

Fig. 6C—Patent Searcher's Search Report

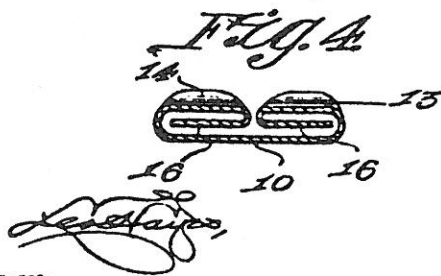
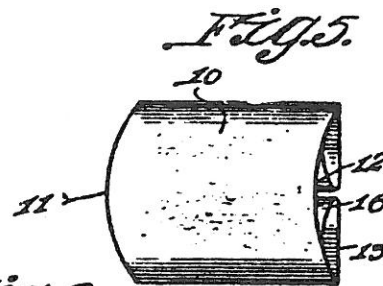
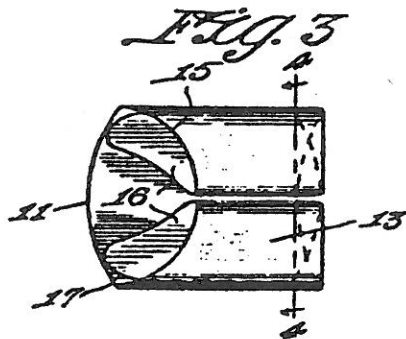
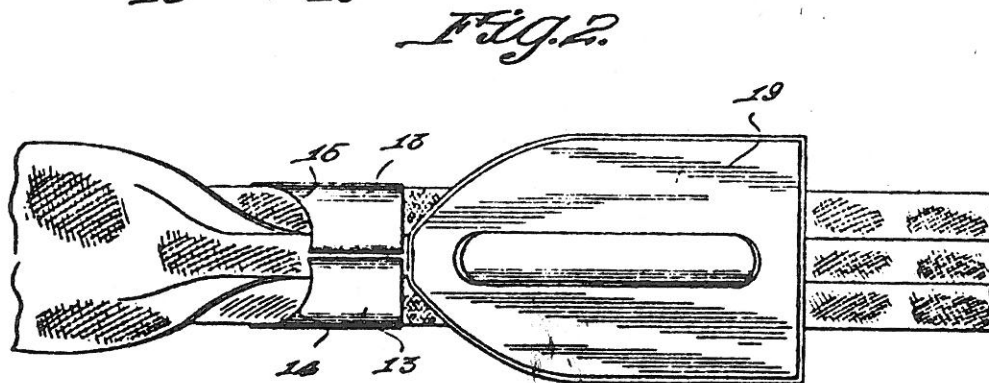
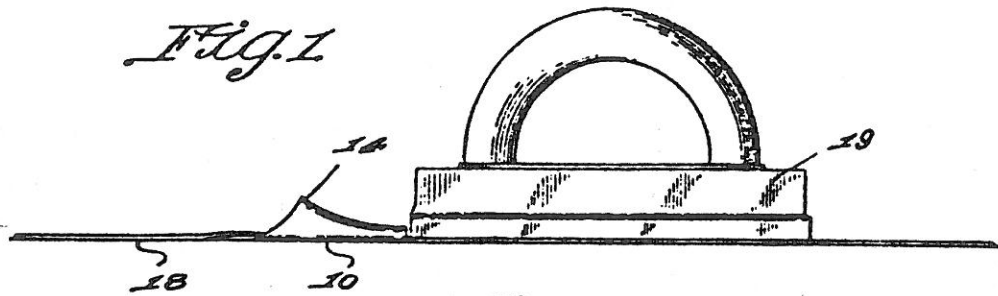
July 22, 1930

L GABEL

1,771,328

FOLDER

Filed March 16, 1923



Louise Gabel
INVENTOR
Victor J. Evans
ATTORNEY

WITNESS:

Fig. 6D(a)—Drawing of Prior-Art Gabel Patent

Patented July 22, 1930

1,771,328

UNITED STATES PATENT OFFICE

LOUISE GABEL, OF COLUMBUS, NEBRASKA

FOLDER

Application filed March 16, 1928. Serial No. 262,243.

This invention relates to cloth holding devices and more particularly to a device adapted for holding cloth in the form of plaits while ironing and sewing.

5 An other object of the invention comprehends an enlarged entrance opening in one end of the device within which the cloth may be introduced.

A further object of the invention contemplates tongue members adapted to form 10 creases in the cloth.

An additional object of the invention consists of a portion removed from the discharge end of the device whereby binding action of 15 a sad iron therewith is obviated while pressing the cloth.

With the above and other objects in view, the invention further consists of the following novel features and details of construction, to be hereinafter more fully described, 20 illustrated in the accompanying drawing and pointed out in the appended claim.

In the drawing:—

25 Figure 1 is a side elevation of the invention while in use and followed by a sad iron.

Figure 2 is a top plan view of Figure 1.

Figure 3 is a top plan view of the invention per se.

30 4—4 of Figure 3.

Figure 5 is a bottom plan view of the invention.

35 Figure 6 is a front elevation of the invention per se.

Referring to the drawing in detail, wherein like characters of reference denote corresponding parts, the reference character 10 indicates a plate member having a curved outwardly projecting forward end 11 and 40 a concaved inner end 12.

The sides of the plate are bent upon themselves upwardly and inwardly upon the plate to provide horizontally disposed guide members 13.

As illustrated in Figures 1, 3, 4 and 6, the outermost end, namely 11, is flared to provide an enlarged entrance and to accomplish such construction the outermost ends of the 50 guide members 13 are upwardly flared, as in-

dicated at 14 and concaved, as indicated at 15 upon the foremost edges thereof.

Tongues 16, carried by the guide members 13, are extended reversely thereof and disposed in spaced relation to the upper side of 55 the plate member 10. The side edges of the tongues being also spaced from the guide members. The foremost ends of the tongues 16 are rounded, as indicated at 17, and projected forwardly for greater distances than 60 the adjacent ends of the guide members 13.

In the use and operation of the invention, lengths of cloth, such as indicated at 18, of a desired width, are partially folded along 65 the side edges thereof and the strip per se laid upon the upper side of the plate member 10. The folded portions of the strip being adapted to repose upon the upper sides of the tongues 16 and to be projected within the 70 spaces as defined between the tongues and the guide members. Due to the fact that the outermost end of the device is flared, an enlarged entrance is provided by means of which the cloth may be readily introduced and fed. The rounded portions 17 for the 75 tongues also permit ease in the drawing of the cloth through the device or the sliding of the device upon the cloth. As illustrated in Figures 1 and 2 of the drawing, a sad iron, such as indicated at 19, may travel upon 80 the cloth 18 immediately behind the device to press the folded side edges or plaits of the cloth. By the same token, the invention could be used in the formation of different kinds of braids and etc., and to effectively feed the cloth or strip to a sewing 85 machine, in the event the plaits are to be held against displacement from the strip per se.

The concaved portion 12, upon the innermost end of the strip 10, is adapted to prevent binding action of the sad iron 19 therewith when the latter closely pursues the plate member. Such construction will also prevent injury to the strip and plaits. 90

Although I have shown, described and illustrated my invention as being primarily adapted for use in the manufacture of plaits, it is to be obviously understood that the invention could be effectively employed for 100

Fig. 6D(b)—Specification of Prior-Art Gabel Patent

United States Patent [19]**Le Sueur**[11] **3,965,591**[45] **June 29, 1976**[54] **NAPKIN RING**

2,600,505 6/1952 Jones 40/142 A

[75] Inventor: **Alice E. J. Le Sueur**, Cobble Hill,
Canada

2,653,402 9/1953 Bonagura 40/21 A

[73] Assignee: **The Raymond Lee Organization**,
New York, N.Y.; a part interest**FOREIGN PATENTS OR APPLICATIONS**

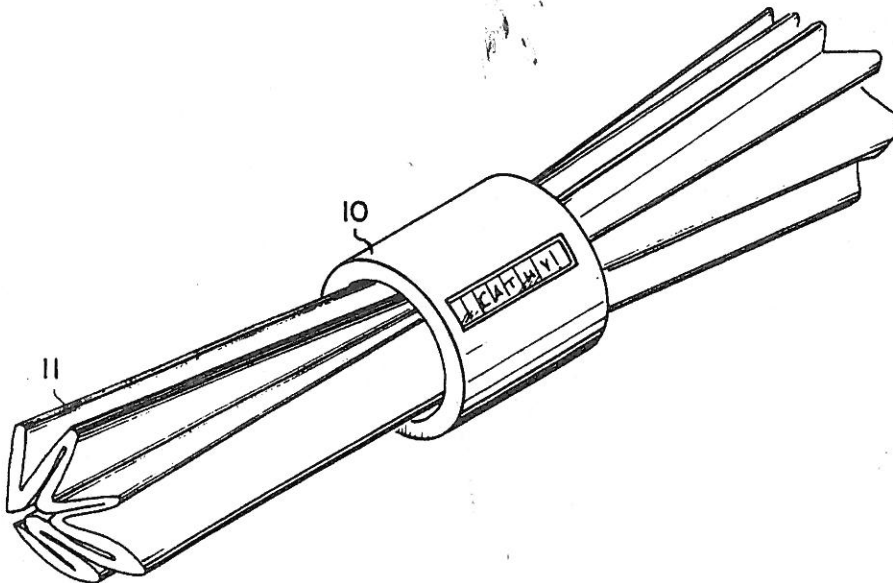
1,308,888 10/1962 France 40/142

[22] Filed: **Nov. 26, 1974***Primary Examiner*—Louis G. Mancene[21] Appl. No.: **527,216***Assistant Examiner*—Wenceslao J. Contreras*Attorney, Agent, or Firm*—Howard I. Podell[52] U.S. Cl. **40/21 R**[51] Int. Cl.² **G09F 3/14**[58] Field of Search 40/142 A, 63, 21 A,
40/21 B, 10; 63/2; 24/8[57] **ABSTRACT**

An open cylindrical napkin ring fitted with magnetic means for attaching an identifying name or set of initials in a recess on the outside of the ring.

[56] **References Cited****UNITED STATES PATENTS**

198,065 12/1877 Annin 63/1 X

3 Claims, 4 Drawing Figures**Fig. 6D(c)—Abstract Page of Prior-Art Le Sueur Patent**