To the Reader

This is not meant to be a fancy book.

This is a working manual. It is designed for use as a ready reference — open on the bench, legible from a reasonable distance — and with a size of type that’s large enough to be read by “old duffers” like myself.

It includes cumulative information. Various terms and techniques, which should become “second nature” with use, are fully described only once. When they reoccur, I must assume you are well “educated” on the subject.

If my computer drawings are not as professional as they should be, the answer is simple: I am not as professional with computer drawings as I could be.

I am just a woodworker — trying to make a point or two.

Wallace M. Blunkel

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This book is dedicated to a very special breed of people:

To all the “DeWalt men” I ever knew — most of whom are cutting wood with the angels.

To all the people who attended my “Mr. Sawdust” school — and dedicated themselves to the things I felt were important.

To Lester Margon, author, who taught me more about furniture design than any college ever could.

To all my sons — who continued from where I left off — and have far surpassed me.

To my wife — who understood me and forgave me for it.

To the World Wide Web — for making it possible to publish this book the way I wanted it published:

Unedited!

Special thanks to my 18-year-old grandson,
James Walsh — and his father, Edward, who kept my computer going.
The Way It Was!

The Fortunes and Misfortunes of the DeWalt Saw

A lot of things had to happen before there could be a Radial-Arm Saw of any kind.

Think about this: From the time of Noah and his ark to the hey-day of Duncan Phyfe, methods of sawing wood knew little change or improvement. Of course, I have no idea how Noah undertook his unbelievable task — but since the time of the Egyptians, and through century after century thereafter, the story has changed very little: Straight, toothed blades, moving in-and-out or up-and-down, were powered by man until the 15th Century, by water to the 18th Century, and by steam in the 19th Century.

Then, in one fell swoop, all kinds of good (and not so good) things began to happen — all because a quiet little lady, hidden away in a monastic Massachusetts community, had a great idea and did something about it.

Sister Tabitha Babbitt of the Harvard Shakers invented the circular saw blade. The year was 1810. With all due credit and admiration for the good Sister, her incredibly good thinking was well nigh miraculous.

We go all the way back to the Greeks and Archimedes and we find the physical beginnings for our modern helicopters. We go back to Leonardo di Vinci and find he was doing some heavy planning toward today’s air-plane. The ancient old-timers were thinking far ahead.

Yet, hard to believe, the great geniuses never seemed to give a second thought to sawing wood. Perhaps they were simply not “in the business” and never felt the need! But, for certain, they had a lot of lowly brothers, through hundreds of years, who were doing some of the finest carving and cabinetry ever seen on the face of the earth.

This reminds me of a song that was popular back in the 1930s — “Everything’s Been Done Before!”

That song’s been bugging me all through my wood-cutting years. My
mind always adds, “Yes, and a heckuva lot better!”

Anyway, along comes this little Shaker lady who was in the business — and necessity nudged her sharp mind to make a round saw blade. But I am still in wonderment: What about the untold millions of sawyers through the ages? They all had a need for an improved saw. Perhaps they were so totally engrossed in sawing wood they never had time for a creative thought.

But think of all the engineering geniuses who have come and gone — yet none of them ever conceived that a toothed-wheel was not only a gear but, with sharpened teeth, it just might cut wood.

When Sister Babbitt got that very rare “bee in her bonnet”, she turned the woodworking industry into a much faster moving business. While she isn’t credited with inventing the “saw-table”, as it was called, it was certainly a natural result — and, by 1830, the machine-age had taken over the wood-working industry.

As is always true, you can’t have good without bad.

Some of the finest furniture made, in all of history, was produced in this country of ours — before the Declaration of Independence was signed.

It was exemplary because it was so elegant. The names of Goddard, Townsend, Savery, Chapin, Frothingham, etc., were to furniture design and construction what Washington, Jefferson and Franklin were to politics.

The fundamental approach to religion by the Puritans, the influence of the Quakers, and the damnable desire to get this new country going, produced a quality of furniture that would never be seen again.

I’m certain Sister Babbitt was the last person who’d ever want to put an end to such a great era — but she most definitely helped. The days of the great cabinetmakers were over! All that was left was Mr. Phyfe (with all due respect), who finally succumbed to the design whims of his wealthy customers — and the profitable whine of mass production began.

Design was drastically affected in favor of all kinds of new machines with round blades and round cutters.

It reached its lowest ebb in Grand Rapids, Michigan, with machines chewing up forests of maple, to be stained a gauche, orange color — and screw-heads, covered with protruding plugs, became a most desired feature. True enough, all those dreary rows of houses, in all those mill-towns across America, needed functional furniture they could afford. But our Industrial Revolution was the death of good taste in furniture design.

DESIGN is EVERYTHING! Without good design, the greatest craftsmanship is wasted. Not all great museum pieces are of the best crafts-
manship. It was design that made them a treasure.

Gone was the Queen Anne panel with its squared, inside-corners at the arch — a feat that can never be accomplished with a round cutter.

Gone was the master-carver’s touch on the cabriole leg and the ball-and-claw foot. Impossible for a machine, such gentle designs were discarded at the altar of “production”.

Thus, Sister Babbitt, seeking to aid in the making of their beautifully simple Shaker furniture, actually started a decline in the quality of our furniture that continues to the present day.

Another of the “culprits”, as were all machines, would be the Radial Saw. (Strange for me to say that, but it’s true!) It would be more than another century before it could even be invented. Unlike any other machine you can name, it could never be run by belts or primitive power.

Mr. Edison had to create a new kind of energy — and that power also had to be distributed. Not until a President, by the name of Roosevelt, came up with Rural Electrification, was electricity taken beyond the industrial cities and into the hinterland. Meanwhile, old fixed-arbor table-saws, with all kinds of tilting tables, were being powered by whatever was available — water or steam, transmitted by wide, slapping, flapping leather belts. Though big, inefficient, electric motors later became the new power source, the wide leather belts kept right on slapping and flapping away.

At that moment, when the combination of electricity and the new round saw blade made the radial-concept a possibility — it still could not happen. The time was not yet quite right. The market wasn’t ready. The need wasn’t great enough.

But it wouldn’t take long!

America had moved into the 20th Century — into and through the first World War. Electricity was flowing through wires strung into the growing industrial centers of America — reaching into the very areas where post-war housing requirements were pressing for answers.

World War I veterans had come home from “over there” — and they needed houses!

The construction industry was badly in need of faster methods for cutting framing members. The cabinet industry needed “idiot-proof” methods for precise cutting — to get professional
results from less costly “hired help”. New materials were being developed—requiring new techniques for “special cutting”.

What was needed was a new kind of 20th-Century saw — and a fellow in Lancaster, Pennsylvania, was ready!

An industrial-arts teacher, Raymond DeWalt was already producing radial-arm machines in a three-car garage. Simple, sturdy, contrivances of utilitarian design with five-horse-power motors.

They would cross-cut and make a flat miter — but the motor did not tilt for bevel cuts or compound miters. The only bearings were in the motor. The motor traveled on a length of heavy, greased, steel bar-stock. It sat on a wooden base. It’s name:

“**The DeWalt Wonder Woodworker**”

Whether Raymond knew it or not, the doors of the Construction Industry were wide open — and he walked through. Better yet, he took a train! He left his manufacturing in capable hands and headed out for Florida where there was a surging land boom.

As the story goes, he never got there! Instead, he met some of the “right people” in the dining car and sold a train-car-load of his “Wonder Woodworkers” without ever setting foot in Florida.

Thus, the beginning of a great story of innovation and entrepreneurship.

From the 1920s, to the present day, wherever builders could set up for gang-cutting operations on-site or pre-cutting operations off-site, the DeWalt has been an amazing performer.

My introduction to this sort of thing was in 1948. Mr. DeWalt was still around the plant and his brother was still “keeping the books.”

He had just sold his company to American Machine & Foundry — and I was in their New York advertising agency, the writer on the AMF account (and a woodworker in the basement of my home in South Orange, NJ). Somebody in the agency suggested I go to Levittown, on Long Island, for a “little education” on the DeWalt.

What I saw was probably the single most extensive use of radial-saws ever conceived.

I saw a row of huge, 7-1/2 hp DeWalts (Model GEV) — 18 of them, in gangs of six — standing in a single straight row, ONE (1) MILE long — separated by long roller-tables and surrounded by big stacks of lumber as far as I could see — standing there like huge animals waiting to be fed.
Material would be loaded on the front-end of the production line. A dozen 2x8s, 2x6s, or 2x4s on edge, strapped together like one solid timber, moved along a conveyor from one machine to the next in each gang — all sitting in a straight line.

Batches of ends would be squared in one sweep of a screaming 20” blade. The next DeWalt would cut them all to length. Then a dozen rafters, on edge, would be cut with beveled-ends on another DeWalt — then cut to length with a duplicate bevel on another DeWalt — then notched, in one full sweep, with an angled 12”-diameter shaper-head on another.

At Levittown, whatever would be required for studs, rafters, and joists — a complete house of framing members — were cut every 23 minutes.

1500 houses in 65 days!

It was the only way for War Veterans to own a good home for under $7,000!

During World War II, the Army Engineers had a need which resulted in one of the most unusual requests ever made to a machine manufacturer.
The Army needed the largest DeWalts possible — and weighing as little as possible. Magnesium was the answer — and any machinist knows the difficulties and hazards of working magnesium. Worst of all, it is extremely combustible. Chips of magnesium will start a fire with no seeming provocation.

What they wanted were DeWalts, each with its own generator, mounted on 2-wheel trailers — light enough for two men to lift easily. Except for the two rubber tires and the windings in the DeWalt motor and the generator, they would be made entirely of magnesium. They were to be parachuted into Pacific battle zones where they could immediately go to work cutting bridge-timbers.

A few of those machines must still exist somewhere. Being magnesium, they would never rust — even if they’re still sitting in a jungle somewhere. I saw one advertised in Philadelphia some years ago — and I’ve wished ever since I’d bought it.

War time or peace-time, the DeWalt Saw found a ready and continued acceptance by the Construction Industry.

As for “Heavy Industry”, it was a different story — much slower in acceptance. There was a reticence — which can always be expected in that market — especially for something totally new.

The attitude of “heavy” industry is to let small industry barge in and make all the mistakes — to prove the need. They hold back till “the bugs are out” — and continue with established methods as long as possible.

The truth is — the larger the company, the more reticence! It’s full of committees — individuals who are expected to make decisions, individuals who can’t make decisions, and individuals who won’t make decisions. Such groups of people tend to cancel each other out in the planning process.

Eventually, however, one of the group will finally surface as the decision-maker — and he too-often also decides against your totally new idea or product!

Faced with ever-increasing production requirements, however, the large companies eventually began to learn that men of little experience could produce accurate results with this new kind of saw — starting with their first days on the payroll! And, as the die-hards lost their “say”, the DeWalt moved in — and stayed!

Small companies and cabinet-shops had their own kinds of “stand-offishness”. The owner would often be more entrepreneur than woodworker, a lover of new ideas, and could make a quick decision to his profit-advantage and his spirit of adventure. However, there always seemed to be that well-entrenched, old woodworker — running the shop with an iron hand — known for the fingers he’d lost to a saw-table.

He wanted nothing to do with that new “Radical Saw”!
Machines with an inhuman control are always resented by humans who resist change — especially if they’ve lost their desire to keep pace — and, most especially, if the change has something to do with their job status or future. How strong those individuals are in the decision-making process has everything to do with product acceptance.

In the case of the “radical-saw”, it faced an industry where the table-saw had, at least, a 100-year head-start. Fifth-generation woodworkers, boasting fists-full of short fingers, hooted at the DeWalt. The belt-makers (a very big industry) also hated it with a passion. It was the only machine that could never be run by a belt.

Even the prospect of making a half-dozen good-looking cuts with accuracy (instead of one cut that looked like they’d chewed it off with their teeth) — was revolting, to say the least. While DeWalt salesmen “cooled their heels” in big-company reception rooms — it became a matter of slow, but anticipated, change.

In those smaller shops, the old-timers also continued to cling tenaciously to the “I-can-do-anything-with-my-table-saw” bromide and, be-cause they had much to say about machine purchases, we could only wish them well — and depart.

They resisted any idea of the “two-saw” shop with real defiance. Even if the boss might go ahead and purchase a radial-arm, he quickly found he’d wasted his money.

The machine was treated like it had the plague — crouching against a far wall, always in poor alignment (worth-less even for “cut-off”!), with its table usually covered with junk — and kept inaccessible to the younger fellows who might like to “try” it.

That term, “cut-off”, became a virtual whispering campaign against the DeWalt through the years — even continuing up to the present day. It conjured up visions of the old pendulum-type, belt-driven swing-saw which had possibilities of mayhem second only to the guillotine! Every saw-mill had one!

In the early days, the whispering was effective. Today, however, such reference simply reflects on the man who’s doing the whispering. (But the old codger still mutters to himself!)

There’s another industry that’s getting a lot of deserved criticism these days — and I intend to heap on a little more:

Our industrial arts schools!

It’s a fact, the radial-saw was an American invention which never
caught on in Europe as it did at home.

This would be of little concern except that a great number of “Old World” woodworkers came to this country, bringing with them the seeming aura of Old-World craftsmanship, and many of them became teachers in our schools at all levels. This has resulted in several generations of Industrial Arts teachers requisitioning table saws, producing talent which is supposed to go out into industry — to face what? A table-saw, of course.

And a DeWalt, most certainly!

The school industry has continued to degenerate toward its present condition of near worthlessness. Their shops are filled with the most expensive machinery they can order, foisted on them by favored machinery houses, and paid for by the local taxpayers.

The Old-World craftsmanship, if it ever was, is no more. The new generation of teachers has never learned the pure techniques of hand-joinery — the foundation for all good woodworking.

As for the machines, they can hardly find the ON/OFF switch.

No longer is fine cabinet-making even a subject in the school curriculum. Instead, the students drive nails into studs for a house they’ll raffle off, build a boat for somebody’s summer vacation — and stand in line for group therapy sessions of all kinds.

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Mr. Sawdust (1952) — Demonstrating the best DeWalt model ever produced. (GWI) — at National Industrial Arts Convention, Atlantic City, NJ
My desk, at the agency in 1948, was covered with DeWalt literature — *all* Industrial. (For a fellow who went home to a Shopsmith every night, it was frightening!)

But I’ll let you see those big DeWalts for yourself.

For the serious woodworker, this is exciting history — and also a very important reference if you’re on the trail of a used machine of this vintage.

Many of my readers own these same machines — and, after 40 to 60 years, I’m certain there are many, many of these DeWalts still in operation — and, I am certain, they’re also available on the “used” market.

On page 15 you’ll see the little De-Walt that not only changed my life (totally!) — but the lives of thousands of other people.

*It can also change yours!*
This was the **Model GE** — work-horse of the industry. A “Long Arm” was available that gave a 31” cross-cut and a 44” rip. A beautiful machine!
My first son, Marc, at the age of three — starting his career! He’s 47 at this writing. Now he designs and builds interiors for fine residences and banks in New York City.
The Great Do-It-Yourself Era

This was the beginning of the most exciting time of my life—the great Do-It-Yourself era. Veterans had re-turned from the War and had to do it themselves. (They also wanted to!) They came to the Home Shows across America—literally, in droves.

Shopsmith was the “big” name. It was, and is, basically a lathe turned into a half-dozen other machines. Their original factory demonstrator was a fellow by the name of “Red”. I don’t remember his last name—but he was a master of woodturning. The wood seemed to melt under his chisel into fantastic shapes. He was also a great showman!

My goal, like many others, was to own a Shopsmith. I wanted one so badly I could taste it! At that time, I worked on Madison Avenue and 40th Street, NYC.

Directly across the street was a Patterson Brothers tool store—and I went out of my mind every noon hour. They sold, and they demonstrated, my Shopsmith!

My wife and I were having the first of our six sons and one daughter. Marc, my oldest, had outgrown his crib and needed a bed. We liked “Early American”—so my wife, Jean, told me I should buy one for him.

I did. I went to Altman’s and paid $150 for it (a lot of money in the 1940s!) When it was delivered, Jean phoned me at the office and said, “This bed’s not worth the money. How much is that Shopsmith?”

“$350,” I answered, hopefully. And she said, “Buy it!”

Nothing in the world could have kept me at my typewriter that day. I went straight across Madison Avenue and walked into a totally new kind of existence—at the cost of almost a month’s pay! (Not quite, but it sure hurt the budget!)
I then found out there was such a thing as a lumberyard that sold only hardwoods. I’d never heard of such a thing! It was in the bowels of Newark — but I would have found it if it had been in Timbuctoo. I told them I wanted Maple, “Three inches thick.” They said, “You mean, 12-quarter.” (Wow, I was beginning to learn the language already!)

What I didn’t know was they would have dressed it into nice 12/4-square turning-stock for a little more money. Instead, I went back to my Shopsmith and labored the big planks of rough Maple into the turning stock I needed. (What a job! I had a lot to learn.)

The end result was well-nigh miraculous. I had bought enough for five turned bed-posts because I knew I would ruin at least one. But I didn’t. SO, I only needed three more for Bruce’s bed, my #2 son! (That meant another trip to Newark.)

My father, a farmer in Missouri, came for a visit later. I asked him, “How do you like the bed?”

He liked it.

“Where did you find that nice Birch?” he asked.

“Birch!? It’s Maple!”

“Nope. It ain’t Maple. See that little freckle in the end-grain? That’s Birch.”

“Anyway,” I said. “It’s 12/4!”

This was the beginning of an addiction that resulted in my building an “Early American” house, 10 rooms of furniture, and searching for a way to get out of the advertising business and into the world of woodworking — as fast as possible.

When AMF bought DeWalt, I had my answer.

I convinced Moorehead Patterson, CEO of AMF, DeWalt could “take over” this exciting new Home Indus-try. I did a marketing study in Northern New Jersey and came back all excited. By this time, he had made Sam Auchincloss the President of their DeWalt Division. (One of the greatest gentlemen I’ve ever known. Jackie Kennedy’s uncle, I think.)

I said, “Sam, we can sell $1,000,000 of DeWalts, per year, in the north 10 counties of New Jersey a-lone!”

After he hired Condé Hamlin for National Sales Manager, they both showed up in New York, took me to Rockefeller Center for a nice lunch, and said, “DO IT!”

While Condé put together a sales force of 30 District Managers across America, I did the original marketing and sales promotion.

You’ll soon see that we turned that little DeWalt into 12 “machines”. (Nine of them were a real stretch of the imagination!)

What I’m about to show you is the cover of the only existing copy of our first literature for the little DeWalt.
We gave it a new name, "DeWalt Power Shop" and described its "3-Dimensional, Self-Measuring Principle" like it had never been described before. (See next page)
There! You’ve just been introduced to the most successful machine that ever hit the Home Market.

It had polished castings. It had a cadmium-plated saw guard and bright red control handles. And, some of you will remember — it performed!

After setting-up the national program, I took Northern NJ for my District. With 125 dealers, all trained and demonstrating (most of them with their own DeWalt Department), we made my original prediction come true.

What a great bunch of dealers! Big and little hardware stores, big and little lumberyards, Mom-and-Pop operations that sold only DeWals, and old-line machinery houses who actually resented “these home-owners” coming into their showrooms (till they found out there was money to be made!).

Today, one of them is among the top houses in the country — a father and son, in those days — and I remember when they were selling DeWals out of the back-end of a pick-up and keeping their inventory of machinery in their home garage.

My District never sold less than $1,000,000 worth, per year, for the next 10 years. In the Power Shop line, we had two models, the MB with 3/4 hp — and the GW with 1-1\,\,2 hp. They sold for $229 and $349, respectively.

My dealers were buying them 50 at a time. In fact, with myself and two assistants, demonstrating in the parking lot of a well-known lumber company, we sold a trailer-truck-load over a weekend. 219 DeWals!

I had a dealer in Bayonne, a hardware store, who had no warehouse. He moved all his “islands” back and stacked his 50 DeWalt boxes in layers around in a big circle — like an amphitheater. The crowd used them for “bleachers”. By the time we got finished “cutting wood” for a few days, he didn’t need a warehouse.

A fellow, named Tom Berry, was the District Manager in New York. We were at each other’s throats all the time. Good friends, but ... ! He had a very smart dealer, Howard Silken, who set up a permanent, full-time, live demonstration in the Bus Terminal in Manhattan.

Most of the NJ commuters went through that station — whether by bus or subway. The more we “cut wood” in NJ — the more machines they’d sell in NY. Up to then, I thought the whole world was mine!

(It was — except for Manhattan!)

Northern New Jersey bought over 3,000 DeWals each year for ten years. (NY sold a like amount — and California always outsold everybody!) Chances are, most of those machines exist today!

You’re reading this book, for one of two good reasons: You either own an early DeWalt — or you wish you did!
It’s my honest opinion that within a very few miles of you, there’s a beautiful old DeWalt just waiting for you to own it. All you have to do is find it.

A little ad, in a little newspaper, can do the trick. Don’t let it sound like you’re willing to pay just any amount of money. “Looking for old DeWalt Power Shop. The older the better. Any condition. Must have solid cast arm and the motor must run.”

With this book, you’ll be able to put it in “like new” condition. In fact, better than new!

So, this is the story that Do-It-Yourself America learned to love.

I well remember that I “worked” the very first Home Show that was ever held in the 34th Street Armory in New York City. That was in 1948. It was also the very first Home Show to be televised — which made it a very big event. TV was in its real infancy, everything was “live” and a very popular lady by the name of Mary Margaret McBride came into the armory with a huge camera and lots of long, fat wires and decided I was to be her subject.

While she was getting ready, I met an even bigger personality by the name of Norman Brokenshire. He was the most famous of the radio commentators at the time (the Cronkite of his day) — and also quite a woodworker at his home in Ronkonkama, Long Island. Alongside him was a young comedian with a “butch” haircut, a newcomer to television — and his name was George Gobel. If you’re old enough, you’ll remember “Lonesome George” for his — “Well, I’ll be a dirty bird!”

While Mary Margaret was focusing on me and my DeWalt, she also decided that I would “make something in 60 seconds”. I guess I looked a little lost because Brokenshire started coming up with suggestions — the best of which was, “Make a box!” After a little head-scratching, I agreed with him.

So, with the big camera whirring, Mary Margaret commentating, and “Broke” and Gobel telling me how many seconds I had left, I made a half-dozen saw cuts, changed to a dado-head and made a half-dozen more cuts, and started picking up the pieces with “Five seconds to go!”

The whole thing snapped together at “Two!” and I held up the box to a cheering, counting crowd at “Zero!”.

Gobel turned to Brokenshire and said, “We call him Mr. Sawdust! Yessiree, that’s what we call this fella!”

And that’s been my name ever since.

The demise of DeWalt began about 1958.

We acquired a Sales Manager who was a former Washington lobbyist and thoroughly greedy. If I tell you he raised worms in his basement, you’ll understand he also had other problems. The combination resulted in his allowing Sears to sell DeWalts.

It took 4,300 DeWalts to fill the “pipe-line” into the Sears stores in my area alone — and I never made a call on one of them. I resigned. My 125
The Great DIY Era

dealers quit all in the same morning. I took my wife, and a nice fat commission check — and the next boat to Bermuda.

Black & Decker bought DeWalt from AMF around 1960. Typical of most industry in those days (the tool industry, in particular), salesmanship succumbed to mere order-taking. Demonstration and customer-training was no more. The great Home Shows were a thing of the past because there were no exhibitors.

With competition from a new radial-saw line at Sears, B&D evidently began to lose position. They both put 12” blades on machines that were powered for 10” blades. They both talked “developed horsepower” and the customer thought he was getting more for his money. When Sears moved their elevating handle to the front of the arm, B&D bowed to them. They threw away their solid cast arm (on the smallest DeWalt) and introduced all kinds of design complications in an effort to be competitive.

It was the era of the “Detroit Syndrome” (Give it fins and it will fly!). Features without function. I sincerely believe — if they’d left the smallest DeWalt exactly like it was during its hey-day, they’d have whipped all comers. (A little sales-effort would have helped, too!)

The end came in November, 1990. The DeWalt was “discontinued” by Black & Decker. (I find myself resenting all those B&D blenders and can-openers and flashlights.)

While I don’t know the whole story, I’m well aware of the years they simply neglected America’s “dream” machine.

For the sincere woodworker, however, this just may be the best thing that’s ever happened:

There are thousands of DeWalts, hidden away in unused shops and basements, that are probably as good today as when they were manufactured. When you find one, make sure it has a solid cast arm and the elevating handle is on the back of the arm — not on the front. Make certain it has at least 3/4 hp (9 amps) — or, better yet, the motor is labeled “12 amps” (1 hp). Or better yet, 1-1/2 hp (17 amps). For best success, on those sizes of machines, use an 8” blade for most of your work — even though it will take a 10” or 12” blade. If you find a larger DeWalt — (but not larger than a 14” blade with 5 hp — too big for a small shop) — buy it! One thing more, it will either have a single-phase or a 3-phase motor. Three-phase DeWalts are great, if you have 3-phase power in your shop. Last thing: Plug it in. See if the motor runs. If it does not (but it hums) it may be a simple problem — like a new condensor or relay — but if the winding is burned out (very rare), forget it!

For a nice finale to this section, I would like to paint a big, beautiful picture for you — with thousands of happy woodworkers, busy as beavers, turning out great works of art to the astonishment of customers and wives.
I can’t do that.

I will remind you that great numbers of people succumbed to the radial-arm concept, long after DeWalt was on the decline — but I seriously doubt if even a small fraction of those well-intentioned owners ever got close to the satisfaction they sought.

Let me explain: There is a world of difference between the radial-arm concept and actually cutting wood with a radial-arm saw. What may have been a highly-anticipated purchase can result in complete and utter disappointment. Most especially, if the machine was a brand other than DeWalt.

With a couple uneducated moves, the thrill can disappear very quickly! And it can be replaced with pure fear.

Attesting to that, one of my sons recently purchased a mint-condition DeWalt, 40 years old or more. The owner had made one cut with it and something happened. Whatever it was, he put the machine back in the box and never opened it again. We bought it from his widow (he had died a natural death!) for a ridiculous price. The only thing wrong with it was the operator. He had purchased it from a source who knew even less about it than he did.

He had bought a box full of ignorance.

Most of the trouble stems from: Table-saw vs. Radial-Arm saw.

Almost anybody can operate a table-saw because he understands one thing: HE will have to PUSH the board for every cut he makes.

This also means that he is completely responsible for the results he gets. If his cross-cuts are a little off-square or his miters have a little gap between them, he has no one to blame but himself! The machine, of course, could have done it perfectly — if only he were more professional.

And he accepts that as a fact.

Not so with a radial-saw. That machine is always assumed to be at fault — never the operator. Oddly enough, this is not far from the truth. But the real truth is that the operator knows too little about his machine. And, over the past 30 years (specifically, since B&D bought it), there were too few places for him to go for knowledgeable help.

Long gone are the days when machine and tool manufacturers vied for position and acceptance in front of the public — in an actual win-or-lose struggle. Virtually gone is the dealer who can professionally demonstrate a radial-saw (even a table saw!), professionally align it, and guide the customer toward the satisfaction for which he is paying. Equally unfortunate is the fact that over 20 different makes of radial-saws have come and gone (or should go!) — each one sucking up little or large portions of the market — and few of them deserving of a crumb.

The abilities of a DeWalt (and I speak only of DeWalts throughout this book) are almost unbelievable.
As a saw (80% of your woodworking), as a dadoing-machine (10% of your woodworking), and as a shaper (3%) — older DeWalts are absolutely unbeatable.

However, the same DeWalt — in misalignment, or with the wrong blade, or in the wrong hands — can not only be frustrating —it can maim the operator for life.

And that just may be YOU.

**I do not mince these words:** Stupid, uneducated mistakes can maim you for life! (That’s a long time.)

This is just as true for a table-saw — but, remember, that machine is never wrong! It’s your fault when you can no longer count to ten on your fingers.

There are few (if any) sources for learning to “master” a DeWalt. I know of absolutely none.

The next best thing is a book like this.

Maybe you should get a copy!
Now we get to the Good Stuff! . . .
Alignment and Treatment of a DeWalt Saw

I remember the first time a DeWalt was delivered to my home. It came in a very big box — and, in those days, they were all put together and “factory-aligned” before they were shipped.

The box was so big that the trucker and I carried it into our living room and set it down — and there it stayed for the next week. He went his way and I managed to get it out of the box by myself. It had no legs or cabinet under it — just the beautiful machine, sitting down on the floor.

I was so all-fired anxious to use it that I plugged it into the nearest outlet and started cutting wood right there in the living room. (My wife’s been putting up with that kind of nonsense for years!)

Today, there’s another kind of pleasure that’s just as great. Whether it involves a vintage car, an early plane, or Grandma’s old cupboard, it’s a wonderful thing to “bring it back to life” — to mint condition — and to use it.

The reward comes in several forms: There’s a great feeling of accomplishment, a pride in the finished product — plus, there’s a great increase in the $-value of the item.

I predict the “original” DeWalt will be manufactured again! Some very wise fellow is going to end up with the original moulds, go into production, and make a fortune.

More power to him! I’ll be the first to applaud.

How much will it cost?

The DeWalt motor is very special, for example. For it to have a flat bottom (for more depth of cut), it’s not “just another motor!” I know that, today, that motor would have to sell for $750.

In the “old days”, it was common knowledge that the motor represented half the value of the machine. So ...

That’s all you get for free. :-)

Click here to buy my book for the rest of the story.
This is the cupboard I built 35 years ago.  
*It’s part of the family.*
Wally with son Wally at Mr. Sawdust School
The Radial-Arm Saw

We’ll talk more later…