FATMAN'S GUIDE TO CABLE TRAINING

A brief overview of cable training history, exercises and regimens

SECOND EDITION

Foreword

I started training with cables in 2007 out of curiosity. My job required a lot of travelling and spending days, sometimes weeks, in hotels all over the place, which meant a lot of missed sessions in the gym. I researched the topic of working out on the road extensively, coming up with bodyweight and isometric exercise routines that kept me busy and helped me retain my strength and most of my shape. I had read about the use of cables and metal springs for exercise, and even owned a strange spring device at home (which I have not to this day managed to identify, as the springs are so rusty that I never really used it), but I never gave much consideration to this type of training. I considered cables a gimmick, something used by geeks and perhaps bored housewives. A **serious** strength and health enthusiast could never have any use for those! Then I read a review of Lifeline USA TNT cables by **Mike Mahler**, a renowned fitness expert, who had only positive things to say about cable training. I did some more reading and found that **Bud Jeffries**, an insanely powerful all-round strength and conditioning athlete, had also delved into this sort of training. I had some spare cash and thought "why not?", so I ordered my first cable set. I have been training with cables ever since, and consider this to be one of the best investments I've ever made. I will not delve into the benefits of cable training here, as this topic is extensively covered in one of the following chapters. Suffice to say, cables are the solution for both the out-of-shape man/woman who has never exercised and the professional strongman who goes around bending bars and lifting tremendous weights.

Over time I compiled an Excel file of exercises, including brief descriptions. I sent it out to some people interested in cable training, and they had good things to say about it. Bear in mind, *anything* would seem good to the information-starved cable-training crowd of today. Seeking more knowledge, I hunted cable training info far and wide across the vast expanses of the internet and over time amassed a small, but useful collection of texts on this topic. Then I decided to "pimp out" the Excel file a bit, include some history and a few chest expander routines. While I'm at it, how about a few pointers on cable training, some personal touch? By the time I was done with the instructional, it was over 60 pages long. I advertised the free manual over at www.bodyweightculture.com, where I usually post, and started getting responses and requests from BWC users. Then the administrators of the site were kind enough to host it

for free download. Over time the manual gained in popularity, and I found it hosted on a number of different sites, which was excellent, as the mission then was the same as it is today – distribute cable training info to as many people as possible at no charge. Since its premier appearance, I have received a lot of feedback, most of which has been positive. I have also done additional research and gained considerable personal cable training experience that I did not possess at the time of writing of the first edition. So I decided to make a few changes to *Fatman's Guide to Cable Training* in order to share these new findings with anyone interested to hear about them.

The changes presented in this edition are primarily related to cable training routines and methods. This refers mostly to chest expander training methods espoused by "old-time" and contemporary strength training and bodybuilding authorities. Some "flesh" has also been added to the history section, which I felt was sort of meager in the original Guide. I have added five new exercises to the seventy-five already presented in the first Guide, although I felt that there is nothing else to add in that department without watering it down completely. After all, progressive cable training is like progressive weight training – the best results are obtained by picking a couple of effective exercises and striving to make advances in terms of weight and repetitions used, not by wasting your time on a couple dozen different exercises every workout. However, I received a few questions regarding some of these exercises (the leg press variations with expanders), and I think that the other ones also merit inclusion. Remember, the stronger you get, the more you will limit your efforts to a handful of "money" exercises.

Why Train With Cables?

Cable (chest expander, strand) training, a popular training method and strength stunt of old-time strongmen, is experiencing a major revival at the beginning of the 21st century. Many of the modern-time strength and conditioning gurus – Matt Furey, John Brookfield, Budd Jeffries and the brains behind Ironmind and Oldtime Strongman websites, to name a few – are promoting cable training as an excellent addition to your training, or even a stand-alone training method in itself. Looking back, it can be noted that many of the old-time strongmen who published strength-training books in the early 1900s devoted parts of those books, or entire publications, to cable training or "strandpulling". The names of Sandow, Bonomo, Danks, Noe and others spring to mind. Given the recent resurrection of old-time lifts and training methods, the increased interest in cables comes is hardly surprising. It seems as if the strength training world is forced to revert to training philosophies from almost one hundred years ago, which gives one a good notion of the actual progress (or rather lack thereof) made in this field.

Cable training/strandpulling can be defined as the activity of stretching out elastic strands/bands, usually rubber tubing or steel springs, to a certain length in certain positions. Strandpulling can either be used to enhance an existing weight-lifting program, or put the finishing "touches" on a physique forged through diligent use of iron, or as a strength and flexibility program unto itself, or combined with non-apparatus and bodyweight exercises. Powerlifters use rubber bands attached to barbells when training for acceleration and power, or for stretching purposes, or for strengthening, rehab and prehab of weaker muscle groups that do not receive sufficient work from the usual weightlifting movements. Wrestlers and other participants in grappling sports combine them with sandbags and calisthenics for developing functional, sport-specific strength. Even sprinters, runners and swimmers can benefit from resistance band training, again for conditioning and strengthening of specific areas.

The basic idea of this instructional is to offer some insight into the history of this method of exercising, provide a list of some of the most beneficial cable exercises in my view and share some of the experiences I have had with cable training. A brief disclaimer: I am by no means a strength training expert or professional athlete/coach; I do not have the expertise of the established exercise gurus, and my educational background is in finance rather than physical training or medicine. Many of the thoughts and

opinions presented here are not my own; where this is the case, I will clearly indicate the original author. Make sure to follow up on these references and read a bit more about cable training from experienced professionals. Also**, always consult a qualified physician before starting an exercise program** – I'm not going to be held liable if you drop dead from being dumb enough to start training despite a potentially lethal medical condition. Stupidity claims more lives per year than cancer and AIDS combined – don't become a statistic.

In order to fulfill, or even come close to fulfilling, your maximum strength, size or performance potential, you cannot rely solely on what some guy will tell you in a book. An advanced athlete should be in touch with his/her body to an extent that allows him/her to know how to train, rest and gauge performance on the basis of his/her individual needs. However, some guidance is always useful. Get acquainted with as many ideas as possible, try them out and retain only the stuff that you find useful.

Remember: it's always better to learn from someone else's mistakes than from your own. This applies not only to cable training, but strength training in general. I have frequently stuck with routines that had ceased to bring results out of a mental dependency – for example, if you enjoy benching heavy weights and see good gains from it for a while, you become kind of reluctant to drop bench presses from your routine altogether once you stop seeing improvements. If you're not a competitive weightlifter or bodybuilder, what have you got to lose if you switch to a routine that proves to be ineffective? Don't fear to try out new stuff. On the other hand, don't change routines every now and then, as this is highly counterproductive. Find a good training routine that is in line with your goals, abilities and available time/space, and stick with it for a while until the gains stop coming. Then find another routine and start using it. It really is as easy as that.

If cables are that great, why aren't they more present in the "muscle media", i.e. why don't we see Ronnie Coleman or the other pros "pumping rubber"? It is true that, recent revival notwithstanding, you won't see cables featured in Flex magazine and similar publications. The reason for this is simple: cables aren't a great sell. A set of Lifeline TNT cables (two handles, door attachment and three R4 cables) will set you back around $30; throw in an additional set of "reds" – which is more or less all you'll need for a long, long time, even if you're pretty strong – and the sum total comes out to around $50. After deducting production, marketing and shipping costs, there isn't really that much net profit left for the supplier. Once

you buy a set of cables, you don't need a gym membership either (you can train with them just as effectively at home), so you're not deriving any income from this source either. Conversely, there isn't much incentive for cable manufacturing companies to pay exorbitant marketing fees to pro bodybuilders to oil themselves up, smile those megawatt-smiles and perform front pulls in front of the camera. They cater to a different clientele anyway.

The driving forces behind muscle magazines are large commercial gyms and supplement manufacturers. They pay substantial amounts of cash for advertising. This is how the people working for muscle mags earn their daily bread. Therefore, the messages they send out through their publications are twofold:

a) you can only get huge and ripped training in a commercial gym: note the exercises presented in the training plans of some of the physique champions – they will often call for something like "*3 sets of 12 reps on the latest Biceps Optimizer 3000 machine, supersetted by one burn-out set on the Inclined Pec Blaster*". Good luck fitting those two into your garage or living room, let alone your budget. The only solution is to join a gym equipped with all this Star- Trek equipment.

b) you need supplements in order to gain strength and size: I won't even start on why this is untrue. Muscle magazines have been pushing ridiculous ideas like "one gram of protein per pound of bodyweight per day" for almost half a century – is it really surprising that so many people buy into the supplement hype? The supplement business is extremely profitable. A bottle of "metabolic mega-booster" or a can of "micro-filtrated-isolated pre-digested whey protein" costs as much as the entire cable setup described above. These firms can afford Ronnie Coleman in ads for their product. Cable companies just don't find it profitable.

Between the gyms and the supplements, very little advertising space can be found for the relatively inexpensive cables. I have absolutely no doubt that, if Jon Hinds of Lifeline USA decided to dish out more cash to the muscle rags, the very next issue of Flex or Iron Man would feature a pro bodybuilder's cable-training routine "which he used to prepare for his crown-winning performance at the Mr. Whatnot competition held in California this July".

Digression aside, we move back to the subject of cable training. What follows is an (abbreviated) list of reasons why one should train with cables:

- Cables provide a different type of resistance to weights and "hit" the muscles in a different way, plus they develop muscles that are difficult to "get to" with regular barbell/dumbbell exercises;
- Cable exercises are very effective at "pumping" individual muscles, which is beneficial as it provides the necessary flushing of the muscle with blood and nutrients (while removing metabolic waste);
- Cables are light and take up very little space, so they're very portable, great for trainees who are frequently on the road for longer periods and want to get some training done (like myself);
- Cables are extremely versatile – they can be used to replicate virtually all weight-lifting exercises, plus a vast number of others that have no weighted equivalent. They also provide unlimited options regarding muscles worked, range of motion, etc.;
- Cables do not stress the joints and tendons the way heavy weights do (although they do provide excellent joint/tendon loading), and hence lend themselves better to speed or explosive work at lower risk of injury (e.g. cable ballistic squats vs. barbell ballistic squats);
- Cables allow you to train with limit or near-limit resistance without the risk of life-threatening injury: getting whacked by a poorly secured cable or handle is very, very painful, but highly unlikely to permanently cripple you;
- Cables enable you to exercise against resistance coming from all angles, unlike weights, where the resistance is provided by gravity (always downward);
- Cables allow you to increase/decrease resistance easily and safely during the exercise, simply by adjusting the length pulled (by adjusting the grip or, if a door attachment is used, by stepping further/closer to the door);
- Cables are very useful for grapplers, as the resistance provided is similar to that provided by an opponent;
- Many traditional cable movements develop flexibility along with strength, an important aspect of physical development often neglected by weightlifters (indeed, excessive flexibility can be detrimental to certain categories of strength athletes, so this is something that is seldom, if ever, trained);

- Cables can be used for isolation exercises that target only the muscle worked, or for compound, full-body exercises that require all the muscles to work in unison; they cover the entire spectrum.

What a list! Are cables, then, superior to weightlifting? Well, the answer is no. Neither method is "superior" to the other, they are very different. Granted, there is some carryover between the two activities; a strong barbell-trained man will be able to work against a greater elastic resistance than someone new to physical training, and a cable trainee will have a distinct advantage when attempting to lift a barbell over a strength-training novice. However, it must be understood that cable deadlifts performed on their own will not make a person better at barbell deadlifts, just like a guy who benches 500 lbs. will bomb on a back press with equivalent cable resistance, or even fail to get the cable set into the starting position. Weightlifting, like all sports, is movement-specific. I can't even count the times I've read or heard questions like "are pushups/close grip pushups/one-armed pushups going to help me increase my bench press maximum?" Many don't realize that this question is just as dumb as asking "am I going to become a better basketball player by training for American football?" Bench-press specific exercises are going to help you increase your bench press maximum. One-armed pushups are going to increase your one-arm pushup maximum.

Okay, so why train with cables? Because, in order to become truly strong, you should challenge your body in as many ways and directions as possible. I sincerely believe that this is the only way to all-round strength, power and health. Why train for impressive powerlifting totals, OR muscular endurance that enables you to crank out hundreds of reps of bodyweight exercises, OR tremendous static strength, OR the ability to perform cable exercises with resistances that most other guys couldn't even budge – when you can train for ALL these goals at the same time?

How Cables Work the Muscles

This should give you a good explanation of why and how cables place more load on the muscles than barbells. Say you can bicep curl 100 lbs. over the full range of motion, i.e. your muscles are capable of handling a load of this magnitude in this particular movement. In the top portion of the curl (the part between having your forearms at 90 degrees to the upper arms and the fully contracted position), your muscles work at a more favorable leverage as the weight is supported by the bones of the arm. Were you just to perform this part of the motion, you could probably lift 120 lbs. or more. However, the maximum poundage in a given lift is determined by your *weakest* point in the lift, just like the old saying goes: "a chain is only as strong as its weakest link". Using the example of the curl, you can only get 100 lbs. past the starting point (arms fully extended – weakest position), therefore this is your limit poundage on the lift. However, you could lift 120 lbs. in the top portion. You're essentially robbing your muscles of the extra growth stimulus that could be derived from the bicep curl exercise. Plus imagine how that would impress the chicks at the gym

The same goes for other lifts. Perhaps you can perform a partial deadlift (from the knees to lockout) with 400 lbs. Too bad you can only break 300 off the floor. Or you can bench press 350 lbs. over the last 10 inches of the motion, but the sticking point half-way off your chest limits you to 250. Full-ROM lifting is important for a competitive powerlifter, but for those among us on a quest for muscular size, shape and real, raw strength, overloading certain portions of the lift could be far more beneficial. Strength over the full range of motion is still important, but heavy partials have a lot of carry-over to full-ROM lifts.

If full-ROM lifting is flawed in this respect, what is the solution? Heavy partials are one of the most common and effective methods. **John Grimek**, a weight-lifter and bodybuilder from the pre-steroid era, performed partial overhead presses to strengthen his overhead press (which was a competitive lift back in the day) and eventually pushed **one thousand pounds** in this lift. Compare that to the average modern-day trainee in an age in which overhead pressing has all but disappeared from the gyms. He would struggle with a standing overhead press with one hundred pounds, or ONE TENTH of the same amount. Budd Jeffries, a modern-day strength wonder and the author of the *Twisted Conditioning* series, has quarter-squatted almost **two thousand pounds**. Think about that, then consider the fact that a quarter-

squat is what passes for a "squat" in most gyms. From what I've seen in commercial gyms, the one or two guys who actually perform the squat on a regular basis employ the "double progression" method: as the weight goes up, so does their butt at the bottom of the "squat", so they're essentially upping the weight and shortening the ROM. And thinking they're making progress. I have long ago sworn never to make fun of these people, so I don't even bother explaining to them why what they're doing is pointless. Or perhaps I'm just an evil bastard who enjoys seeing other people stagnate and/or get weaker and frustrated while I make slow and steady progress, in which case I need assistance of the psychological variety. Enough about me, back to the topic of cable training:

One guy actually set out to make an entire training "philosophy" based on partial training. His name is Peter Sisco and he advocates using nothing but partials and heavy lockouts on all exercises, reasoning that a) this overloads the muscles harder, and b) minimizes the chance of injury due to limiting the exercise to the "safe" part of the motion. Now, this philosophy turned out to be seriously flawed and I have never read a positive review of the system apart from the testimonials used to promote the book. I'm not an advocate of partial-only training, as full-range exercise is still the best for overall strength development, but you can gain a ton of strength and size from partials. They help your body get accustomed to handling heavy weights and trigger your central nervous system into muscle-building overdrive. Just remember that partials are a **tool** in getting your full-range lifts up, **not a substitute** for full-ROM training. Many get seduced by the fact that they're lifting so much weight and become mentally dependant on the poundages.

How do you combine the best of both worlds – get the benefits of full-range lifting and also enjoy the overload in the strongest part of the motion? You got it – cables! Using cables you can add resistance to the top part of the motion while keeping the resistance in the initial part of the lift low enough for you to be able to "break out" of the weak portion. There are two ways to do this:

The first method is pretty straightforward – just use cables as a substitute for barbell and dumbbell exercises. The Lifeline TNT cables are great for this, as they have all the necessary features:

1. They can go up to Goliath resistances;

2. They are long enough for exercises like standing presses, up-right rows or curls, where you stand on the cable and hold the two handles to perform the exercise, as well as door attachment exercises, like presses, pulls and sled-dragging exercises;
3. They have solid handles, which allows for proper "weight" distribution (you need a solid handle to stretch "heavy" cables).

I'm sure other cables work just as well, it's just that I have experience with the TNT model.

The second method is even better – combine the best of both worlds. In other words, combine barbell/dumbbell movements with cables. I must note here that the TNT cable set is not the best instrument of achieving this, as it consists of straight lengths of plugged rubber tubing – the flat, looped bands sold by Ironmind or Elite Fitness are much more useful for this purpose. The Westside Barbell Club uses the cable + barbell method in their training to break through sticking points in the powerlifts: they teach their lifters to lift at high speed through the combined use of bands and barbells, in other words develop acceleration to blast through the sticking points.

Although I train regularly with weights and perform the three powerlifts, I have not implemented this speed-training portion of the Westside Barbell Template into my sessions. What I have in mind is the combination of barbells and cables for increasing muscular tension during an exercise for the purposes of building muscle mass. The cables would provide extra tension in the "strong" portion of the exercise – not just the bench, squat and deadlift, but also rows, curls, dips, pull-ups/chin-ups, etc. And the answer has arrived. Check out the Jettison Technique in the chapter titled "*Combining Cables and Other Training Tools*".

Cable Training / Strandpulling Personages

Who invented the expander? That's as tricky a question to answer as "who invented weights?" It is impossible to determine the origin of cable training, but they have been around for a good while. The concept of training with elastic resistance dates back to the invention of the bow. Here is a quote from an excellent strandpulling article[1]:

"*(...) Expanders. Strands, Cables, call them what you will ... they are not as modern an idea as you may think.*

Their actual origin (as far as my own research goes), are from the Sumerians of about 3,000 BC (No that's NOT before cables).

There are many records of their Archers using Bows to practice pulls. They would use bows of increasingly stronger pulling power, as they became stronger themselves. Often they would tie two or even three Bows together, simply to increase the resistance in their training.

Practicing the 'Archers Pull', wasn't the only exercise they did, which shows how much they understood physical training.

Interestingly enough, they would use BOTH HANDS to do the pulls. Now as an Archer, would always use the same hand to hold the Bow and the other to draw with, using both hands during training showed they were thinking beyond just improving the Archer's Pull.

In fact one inscription on an old Vase, mentioned that it was advised that ALL Warriors should practice the bow for better performance."

I would only add that other cultures that relied on the bow also used bows of progressively heavier resistance to train their bodies for combat. The exact training methods are largely unknown, although the archer pull and a variation of the up-right row have made it onto ancient pottery. The Sumerians appear to have adhered to a comprehensive system of training, but making up your own exercises on the go is always a possibility with cables (and one of the reasons why they're so great).

[1] Turton, Dave: *On The Pull*, courtesy of SFUK Articles and Interviews

With the advent of rubber into Europe, the rubber cable expander was devised, first as a curative device for the medical profession, later as a strength training tool. The steel spring expander also became popular in more or less the same period.

In the era of mail-order bodybuilding courses, strandpulling / chest expander work received a lot of attention. Back in those days, many performers of strength feats and physique champions picked up on the immense cash-earning potential of the strength training and muscular development market. After all, what man doesn't desire greater strength and muscular size? However, the technological and infrastructural limitations of the period stood between them and the future cash cow. Barbells and dumbbells could only be found in athletic clubs and the gyms owned by the strongmen themselves – there was no mass production of disc-loading bells like there is today. Heavy weights were cumbersome and... well, heavy. Making and transporting heavy weights by stage-coach or train would have been an extremely unprofitable endeavor. Gyms and athletic clubs were not as readily available as today, and many of them did not cater to the iron crowd, preferring club-swinging and gymnastics to iron-slinging. Selling weights would have made these courses so expensive that they would be pretty off-limits to the general public. So the musclemen thought about their options (yes, back then musclemen *could* think, contrary to

popular opinion!). They came up with an ingenious solution: strength-training courses... without weights! The first of these courses were based mostly on self-resistance exercises and calisthenics. From what I've seen, you would send away for a training course and the Lessons would arrive monthly by mail. They also included tips on general health, hygiene and nutrition. As is common to all newbie trainees, the ones who took up these exercises registered increases in muscular bodyweight, strength and definition. Remember, back then a 14-inch muscular arm was considered "big". Most physical culture enthusiasts were thin and small, often the victims of childhood ailments; back in the day the vast majority of naturally big guys did not deem it worthy to exercise. They trained faithfully and they grew. After some time spent on this type of program, they would be strong enough to commence a weight-lifting routine. Many of these former pupils later became mail-order strength coaches themselves. This makes you think about an age when pencil-necked scrawny "personal trainers" and "gym trainers" would have been laughed at instead of listened to as they are today, does it not?

As civilization advanced, roads became better and the post offices covered more ground. It was still pretty expensive to sell mail-order dumbbells, but mail-order courses could be written as to include a simple piece of equipment. For value-for-money, effectiveness and transportability, rubber cables could simply not be beat. Steel springs might have been somewhat more expensive, but this too was an affordable piece of equipment. Thus the chest expander business grew.

One of the more famous chest expander courses from the early 1900s was written by the great **Eugen Sandow**, considered by many to be "the man who started it all" in physical culture, or the "grandfather of bodybuilding". He engineered a bizarre expander device with two light dumbbells for handles; the dumbbells themselves were halved lengthwise and connected by steel springs, so one had to squeeze the dumbbells in order to obtain a good grip on the expander and use it for the various exercises. Albeit an inspired method of training the grip, using weights and cables simultaneously, the device was most likely a gimmick; the dumbbells were light, and in my opinion using weights as chest expander handles allows the force of gravity to help the user in stretching the cables in certain positions or pulls, hence defeating the purpose. However, I have no experience with the "Sandow Developer" and cannot vouch for its effectiveness, or lack thereof. It has been reported that a number of users of the Developer in fact did develop decent physiques, and even had contests for best built physical culturist. In conclusion, it can be said that this device was *different*.

There appears to be one household name in cable training, and that is of **Fred Rollon**, also known as "the Human Anatomy Chart". The data that can be gleaned on this early 20th century strongman and performer is unreliable to say the least, and there seems to be no mention of him in any of the old-time exercise and lifestyle books. The only actual image of him can be seen on any internet website promoting strandpulling and cables and pictures him doing a back pose, like in a bodybuilding contest.

So what does the legend say on old Fred? He was a German turn-of-the-century strongman who trained exclusively with cables (none of the old-timers trained **exclusively** with anything, but we'll let that one pass). He was immensely strong and his cables could resist the pull of horses. He was also an accomplished weight-lifter – he could lift heavy barbells when challenged, but again, trained only with cables.

I have been unable to find any additional information on Fred Rollon, and would therefore appreciate any input immensely.

Alfred Danks is not a name that rings many bells, but this strongman, model and physical culture expert played an extremely important role in the popularization of the chest expander. He published two known books, *The Danks System of Physical Culture* and *The Chest Expander for Abounding Health and Building Better Bodies*. In his books he mentions performing weight-lifting feats, but his strongman act revolved around the use of the chest expander. Due to the lack of information on this physical culturist it is difficult to establish whether his claims were true or embellished, like so many bold statements of the era. What cannot be disputed is the fact that he possessed a well-developed physique which he managed to retain into old age. You can see this physique in many of the photographs used to illustrate the exercise description section.

This is what Danks, one of most eminent chest expander training authorities in history, had to say about strength development through the use of the expander:

"*Of course, there are two ways of using an expander and they are very different from each other, almost as far apart as the poles.*

When a person comes to me for general instruction to establish or safeguard health, to preserve fitness for everyday life, or even for improved physique, he has before him a pleasant and an easy task. The student will only be called upon to use an expander of light resistance, one might even term it a weak expander.

(...) But when the desire is for Great Strength and Heavy Muscular Development and the ability to lift heavy weights, the modus operandi alters considerably. The student will have to work more strenuously and severely. It will not necessitate having to discontinue the light work however, as this plays a great part in advanced training, but the light work will have to be combined with the heavy work with a powerful expander. The light work on quick body movements being essential to keep the muscles supple and to act as warming-up exercises prior to undergoing the more severe work with the strong expander.

(...) The student should select some good exercises or pulls to work upon daily such as the "Front Chest Pull", the "One Arm Press", the "Overhead Downward Pull", the "Lateral Raise" with body erect and with body bent, the "Back Press", the "Front Chest Military" and the "One Arm Press Military".

(...) The student should repeat the exercises several times with as many strands attached to the expander as can possibly be managed, and generally work on the gradual progression plan of increasing the poundage of the expander as time goes on to correspond with the increased strength obtained. If this method of training is conscientiously and regularly maintained for about 20 minutes daily, it will take but a few weeks for the student to notice a remarkable increase in his Strength and Muscular Development, and particularly will the Triceps, Deltoids, Latissimus-Dorsi, Serratus-Magnus and Trapezius muscles be built up."[2]

As a point of interest, Danks was against exercise performed in the "Anyhow" style (a departure from strict body position during the performance of an exercise, i.e. contorting the body to enable the use of more resistance). He maintained the opinion that this sort of work – he even went so far as to not even consider them exercises – did nothing to promote strength and muscular development. The strand-pulling associations, on the other hand, always included "anyhow" pulls in their official itineraries. I have seen photographs of champion pullers performing "anyhow" exercises, and can attest to the fact that the contortions they resorted to required a high degree of balance and flexibility. They were also very amusing at times. Check out this photo (courtesy of www.oldtimestrongman.com), showing the extremes this puller was prepared to go to in order to achieve a "heavier" back press:

Earle Liederman, another weight-lifting and physical culture legend, also ran a very successful mail-order course based on chest expander exercises. It was a follow-up course of his initial self-

[2] Danks, A.: *The Danks System of Physical Culture*, courtesy of www.sandowplus.co.uk

resistance/calisthenics course. I have heard this referred to as one of the best cable training courses ever written, but unfortunately have not had the opportunity to read it.

Thomas Inch, another famous strength athlete and performer, also included a list of expander exercises into his books on training. He also had a "challenge expander" (like the famous "Inch Challenge Dumbbell"), and used to perform a strength stunt where he would back press a heavy-duty expander, then ask two hefty volunteers to hang from his outstretched arms for additional resistance. He would then twirl around with this ponderous load before an astounded audience. Inch's expander exercises were based around a cable device that could be attached to a wall (not unlike Sandow's Developer), which allowed for some creativity in exercise invention.

Another popular figure from the period was **Joe Bonomo**. He appears to have written courses on everything, from calisthenics to isometrics to cables to weights. **Roy H. Noe** was not a physique star or weightlifter, but he owned a company that manufactured rubber exercise devices ("*Noe's Graduated Xercisors*") that consisted of handles and a single flat rubber band. I have heard these spoken of in a very affirmative tone, but it'd be impossible to find any of these devices today, as the company went out of business many years ago.

Cable training became so popular that contests began to be held in Europe, with the big cable boom taking place in Great Britain. Officially the sport was called *strandpulling*, and the contestants would stretch cables and springs using an official list of pulls which will be presented further in this text. I remember owning a not-so-recent Guinness Book of Records that quoted some of the strandpulling records, and some impressive poundages were being hoisted/pulled. A great article by **Brad Reid**, whose father **Jack** appears to have been a cable-training authority of note in the US, mentions a cable pulling contest held on US soil in the 1940s, but it seems as if the strandpulling bug never really caught on in the States, at least as far as competitions are concerned.

A number of more recent physique stars were known cable-users. Bodybuilding legend **Reg Park** wrote a brief but informative cable training brochure describing cable exercises. He devoted a portion of his time to cable training. **Fred Hutchinson** is a name that crops up frequently in cable training discussions; he wrote a number of strandpulling articles for the strength publication MILO, but I'm unfamiliar with his work, except through what I've read from other sources. **Syd Devis** was a British champion puller in

the 9 and 10-stone categories, and I've come across a forum post regarding a wonderful book he wrote about preparation for strandpulling competitions: some of this material will be presented in the following chapters.

It has come to my attention that a certain online company dealing with all things related to old-time strongmen has recently re-published the Syd Devis course and is selling it through their website. This is excellent, and I'm glad that this legendary course has become available to the information-starved cable training public. I would just like to make a note here that although a significant portion of this book was presented in the first version of *Fatman's Guide to Cable Training*, this does not infringe in any way on the copyright of the company in question, as it was available as free material at the time of inclusion in the Manual. In other words, I was there first. Just in case someone decides to resort to some less-than-pleasant discourse and/or action, as has been the case with certain old-time strongman material previously.

Bob Hoffman of York Barbell fame, a controversial yet highly influential persona in the world of weightlifting, covered cable training in some of the books he published. The focus of his work was on lifting barbells and dumbbells, of course, but he held cable training in high regard and even included them in one of the famous York Courses. An outline of the York Cable Course will be presented further in this manual, along with a chapter on the role of cables in outstanding arm development. In the meantime, here's what Hoffman had to say about the Chest Expander System and expander work in general[3]:

" *Everywhere one looks around our gym are great arms – not one of them the product of specialization in arm exercises, gut all of them the result of all around physical training: lifting first of all; practice of repetition lifting/ exercises; most of them have hand balanced, tumbled, worked with cables, dumbbells and performed regular bodybuilding exercises with barbells. But there is no special work for the arm. The best shaped biceps have been acquired as sort of a byproduct of other exercises, not as a result of specialization or any sort*.[4]"

[3] Hoffman, B.: *York Advanced Methods of Weight Training*

[4] Hoffman, B.: *Big Arms Book*

"*I cannot overlook the great value of cable expanders, or the Home Gym in developing all of the muscles of the upper body, particularly those of the upper back. Cables have a definite and important place in physical training. Every man interested in physical improvement, the building of strength and a perfect physique, should have a set of cables to use either until he procures a set of weights of his own, or to use in conjunction with a set of weights if he already owns one, or is a member of a club where weights are available.*

Invariably when you see a man with a wide-spreading back and mighty shoulders, even if he is a star weight lifter, you will learn upon investigation that he has spent considerable time in cable training. A few years ago, Joe Miller, who was definitely one of the strongest men in the world of his weight (only his inability to master best lifting forms prevented him from establishing world's records, although he gathered much fame through being senior national champion of the United States and a member of the Olympic team in 1936) spent a winter in the practice of cable exercises. He had used them in the beginning of his physical training career and they had played an important part in aiding him to set a record in chest growth of twelve full inches in his first year.

He habitually trained in an unheated garage back of his home. Constant training in the cold made his muscles stiff and sore, so he gathered together a real cable outfit and a number of inner tubes which he employed in his training and with which he exercised in his home. He worked hard that winter with chest expanders as they are so often called. In the spring he was stronger than ever as evidenced by his unusual lifting ability. Now don't feel that I am trying to tell you that cables will develop the huge muscles of the legs and back to an extent which weights will, but Joe already had a phenomenal lower back and legs, and the cable exercises coupled with his usual work were enough to keep these muscles in shape. He greatly increased the strength of his upper body, notably the muscles of his upper back, which more than offset his lack of weight lifting training. What a back the man had! When the latissimus was tensed his arms stood out to the side at an angle of forty-five degrees. On the Fourth of July he posed in that manner for a newspaper photographer which gave rise to the opinion that weight lifters were so muscle-bound that they couldn't even hang their arms at their sides.

Every cable exercise has a good effect on the muscles of the upper body and there are many of them. But the best of all is an exercise which cannot be practiced with weights. The chest expander is extended at arm's length overhead, then, with arms straight, the cable is stretched so that the arms are pulled down, slightly below shoulder level. You can feel the big muscles of the back in operation as this exercise is practiced. A somewhat similar movement and one that is also highly beneficial for the muscles we are discussing is as follows: Holding the cables overhead with palms out, keep the upper arms level with the shoulders and extended to the sides; the forearms at the start are up in the goose neck position. Straighten the arms. While this movement is admirable for the triceps, you will feel that the latissimus is also heavily involved.

The front press, the archer's movement and the back press are other good cable exercises, particularly the latter, for in this style more resistance can be used than in any other way. Raise the cable up and back so that you have the strands extended across the back, knuckles out, the shoulder blades compressed. Extend the arms steadily to the side, pressing the shoulders out as far as possible. Hardening the muscles as the shoulder blades are brought together will aid in the effects obtained from the movement. Everyone admires a broad, well-muscled back. You'll find that nothing surpasses cable training for broadening the back. Nearly every exercise in which the upper body is involved with cables will develop the muscles of the upper back. The lateral raise with the use of stirrups has the same effect as a similar movement with weights. Leaning and extending the arms to the side as in the dumbbell swing and various forms of rowing motions, all develop the latissimus.

I can't urge you too strongly to include some cable or chest expander exercises in your training. They will fit in between the heavier weight exercises, or on your easy days of training – the days I often term tinkering days, when you perform a multitude of exercises which are not possible to practice on the heavier days of training."[5]

The "father of modern bodybuilding" and another Hoffman-esque personality (is it a surprise that they clashed often, and clashed hard?), **Joseph "Joe" Weider**, also included a chest expander course in his early Gold's Gym publications, but I haven't been able to locate a copy.

[5] Hoffman, B.: *Big Chest Book*

Modern-day cable trainees of note include grip master **John Brookfield**, who published an excellent book titled *Training with Cables for Strength*, available through Ironmind Enterprises, in which he provides descriptions for over fifty exercises using an Ironmind chest expander. Some criticize the book for poor quality of photographs; if it's large color photos you're after, buy *Sports Illustrated* or *Playboy*, for crying out loud. Other "intelligent" comments on the book include "not enough exercise routines" (you're supposed to create your own – if you don't know

how to do that by now, then perhaps strength training is not for you) and "he didn't offer anything new". The idiocy never ceases to amaze me. The same people who won't buy Brookfield's book because it's "not innovative" are quite ready to dish out hundreds of dollars to a certain internet guru who sells books that teach you how to do squats and pushups. That said, the price could be lower and the quality of print better (the same can be said for all Ironmind books), but nothing can be taken away from the quality of training information. I own the book and recommend it heartily.

Dennis Rogers, "Pound-for-Pound the World's Strongest Man", also uses cables in his training. He seems to avoid conventional training methods and performs strength stunts like crumpling up frying pans like they're made of paper, resisting the pull of two motorcycles moving in opposite directions, etc. But make no mistake, he can lift weights too, specializing in thick-bar grip and wrist work. Have a look at http://www.dennisrogers.net for excellent training advice and quality products.

Bud Jeffries, the author of *Twisted Conditioning* and one hell of a strong guy (quarter squat of around two thousand pounds), also includes training with chest expanders into his mixed exercise regimen. I have read his great book *Twisted Conditioning*, which covers just about every type of training known to man. Yes, it also features cable work. Bud uses all sorts of exercises – high-rep calisthenics, bodyweight strength moves, agility exercises, heavy weights, heavy partials, cable training, plyometrics, etc., and has attained an unbelievable level of strength and conditioning. When you see a 300-lb. guy doing flips and cartwheels, you tend to think that you've seen everything. And then he does some handstand pushups. Great strength, great approach to training. Unfortunately, it seems that his company, Strongerman Productions, and associated website are no longer in function due to financial troubles (that is the offered explanation, at least).

Cable training is experiencing a revival today, and is mostly used by athletes from the grappling arts, mostly wrestlers, arm-wrestlers and MMA fighters. However, it is becoming increasingly popular among athletes from other sports, most notably bodybuilders and weightlifters. The training methods espoused by Westside Barbell include a lot of work with elastic resistance. The main part of their resistance band training relates to the development of lifting speed (speed squats, benches and deadlifts performed with rubber bands attached to a relatively light barbell), but a significant portion of time is dedicated to rehab and "prehab" band movements. These exercises are quite dissimilar to the cable pulls and presses employed in classic cable training, but the principle (exerting force against a variable resistance and developing what they term "compensatory acceleration") is the same. While these exercises could not be classified as "strandpulling", they still fall into the broad category of cable training.

As opposed to weightlifting and training with bodyweight exercises, where everyone seems to have discovered "the ultimate way to train", little cable training information is available through the internet. Apart from the books offered for free on the Sandow Museum website (www.sandowplus.co.uk) and some excellent articles posted on the Strandpulling Message Board (which has seen a moderate revival lately), most of this material is pretty hard to come by through the internet. The following chapter will detail training information I have compiled from several sources. Please take note that the material presented therein was obtained free of charge on the Web, and sources will be referenced as appropriate.

Cable Training Exercises

This chapter will include descriptions of a number of cable exercises. I felt that detailed descriptions should be provided, as the average trainee is rather unfamiliar with this type of exercise. Most people who have set foot in a gym know how to perform a bench press or a barbell squat; in comparison, the number of trainees who are familiar with the back press or front pull is relatively low. Having said that, cable exercises are simple and easy to master – then it's just a question of adding resistance.

Important note: although cables are generally safer than weights, i.e. it's unlikely that your cable set will crush you to death in case of muscular failure, injuries are still possible. Common causes of injury are twofold:

- **Improper securement of cables:** some exercises require one end of the cable set to be attached to a fixed object, or secured underfoot. A stretched cable is like a cocked bow, so there is always the danger of a handle slipping and hitting random bodyparts at full velocity. A more extreme variant would be attaching the cable to an unstable anchor and bringing the entire structure down on your head. Use common sense on this one.

- **Using too much resistance**: remember, the positive portion of a cable exercise begins at low resistance which increases as the cable is stretched further. The negative portion, however, begins with the cables at maximum resistance. Using too much resistance can cause quite a "snap" back, and sprains can easily occur. With exercises like cable sled dragging, the kick-back could easily throw you off your feet. It is important to stay focused on the exercise throughout the workout.

Cable training exercises can be loosely divided into two categories:

a) Classic strandpulling exercises (i.e. the old competition pulls): these are primarily what one would term "chest expander" exercises, as this was the cable device used in competition pulls;
b) Assistance/supplementary exercises: these appear not to have been included in the competition pulls (at least the list I was able to obtain), but should be practiced for development of strength and muscular size; also performed with "chest expanders";
c) Simulations of exercises with barbells and dumbbells: this should be self-explanatory;
d) Everything else: given the versatility of cables, this latter category can contain hundreds upon hundreds of exercises. I will try to include as many as possible, but the only real limit is your imagination.

The competition pulls/exercises are all excellent upper-body developers. Unfortunately, none of these exercises seem to target the lower body. Therefore, if you're embarking on a training routine consisting

of competition pulls, I would suggest performing a few heavy lower body exercises with weights in addition to the cable exercises, perhaps one session per week, to attain solid overall development. Suggestions will be presented later in this text. Due to the versatility of the Lifeline TNT cables, you could also add some lower-body work from my list of other cable exercises. However, I am a firm believer in the superiority of weights for lower body training. Heavy barbell squats cannot be replaced by any other exercise, and you should be performing them once or twice per week unless you suffer from a medical condition that makes squatting dangerous or impossible. Same goes for heavy deadlifts, which are generally safer for the home trainee as they eliminate the need for a power rack or spotter.

This is a list of the competition pulls sanctioned by **BASPA** (*British Amateur Strand-Pulling Association*)[6]:

No.	Exercise Name
1	Overhead Downward Pull (knuckles inwards)
2	Overhead Downward Pull (knuckles outwards)
3	Two arms lateral raise (back and front)
4	Two Arms Front Chest Pull at attention
5	Two Arms Front Chest Pull (anyhow)
6	Right and Left arm front chest pull (anyhow)
7	Right and left arm Military Press
8	Two Arms Back Press at Attention
9	Two Arms Back Press (anyhow)
10	Dislocation at the attention position
11	Dislocation (anyhow)
12	Two Arms Press from Behind Neck
13	Two Arms Upward Front Chest Pull (feet apart)
14	Right and left arm Front chest Pull (in erect position)
15	Right and left Arm Upward Push Anyhow

For those familiar with cable exercises, the names of the pulls will be more or less self-explanatory. It is important to define certain terms used:

"Anyhow" – body positioning is not important, as long as the cable is stretched to lockout. It is sometimes possible to stretch "heavier" cables by contorting the body to accommodate the line of

[6] Devis, Syd: *All About Strandpulling*, provided courtesy of the Strandpulling Message Board. Original book published cca. 1940, quoted information from reprint from 1950.

resistance and complete the pull. The "anyhow" would mean that there is no need for strict body positioning, i.e. anything goes.

"At Attention" – back and legs straight, knees locked out, heels touching each other. This term appears to be interchangeable with "military" (as in "military press").

"Erect Position" – get your minds out of the gutter. This simply means standing upright, back straight.

So a "back press anyhow" would require less strict form than "back press at attention". The difference is similar to that between the military press and push press in weightlifting. Bear in mind that this is the interpretation I've come to through study of various articles – I don't own the original Syd Devis course with the exact explanations and descriptions.

On to the exercises:

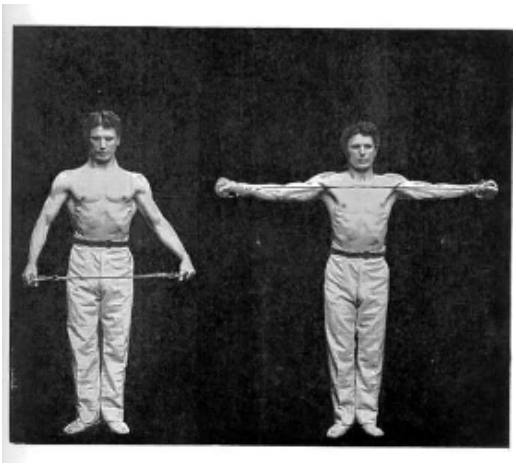
1 and 2: Overhead Downward Pull, Knuckles Inward/Outward:

Hold the cables overhead with palms facing out (knuckles inward version) or in (knuckles outward version) on straight to almost-straight arms, and pull laterally until the cables are pressed firmly across the traps and the hands somewhat below the plane of the shoulder. Make sure that you don't bend the arms much during the movement. As a general rule, use less resistance on the "knuckles outward" version. A great exercise for the latissimus dorsi muscles.

Brad Reid's cable training article[7] opines that the overhead downward pull is an exercise that is best performed for high repetitions, "up to 20 is fine". I have performed this exercise for as low as three all-out reps, and I must say that it is rather tricky to perform with high resistances. I often get kinks in my traps and neck from going "heavy" on the ODP. On the other hand, it is my opinion that you aren't going to build much strength from 20-rep sets. A happy medium would be using a resistance that allows for 8-12 reps before you feel a "burn".

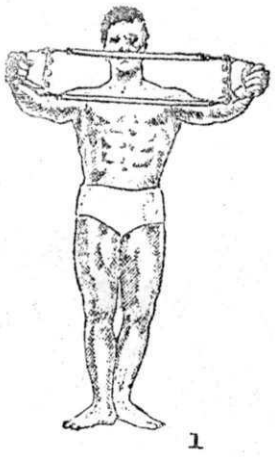
[7] Reid, Brad: *A Primer on Cable Training*, courtesy of Fred Crivello's website

3: Two Arms Lateral Raise (Back and Front):



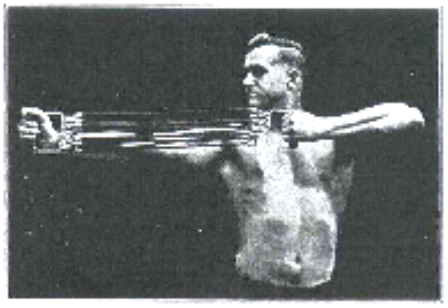
Hold a set of cables with the arms fully extended downward. The cables should lie across the front of your body (for the front variation), or behind the body (back variation). Don't snap the cables, but pull the slack out and quickly accelerate the cables until your arms are held laterally at about clavicle/chin height. In my experience the back variation is more difficult.

4 and 5: Two Arms Front Chest Pull –At Attention and Anyhow:



Hold a cable set directly out in front, arm placement as on 9 and 3 o'clock on an imaginary clock face. Keeping the arms straight or slightly bent, pull the strands straight back to shoulder plane height but extend slightly further back, snapping and stretching the cables across the upper chest for increased range. At attention – keep the "military position" and pull without contorting the body. "Anyhow" allows for the use of a less strict body position; I usually dip the knees and bend the torso slightly to start the pull when performing the "anyhow" variant. Either way, this exercise is an awesome deltoid and upper back developer, probably better than either weights or bodyweight exercises.

6: Right and Left Arm Front Chest Pull (Anyhow):




Same as the other chest pull variants, only in this version you start from the position of the completed pull and perform the exercise with one arm. In other words, if you're working the right arm, stretch the cable set to full extension, then keep the left arm outstretched and perform repetitions with the right arm. Switch arms and perform another set.

7: Right and Left Arm Military Press At Attention:

Similar to the exercise performed with dumbbells. Here's how Brad Reid describes it: "*If working the right arm, hold the left hand palm pressed against the left hip in a position so that the anchoring cable handle is sandwiched between the hand and the hip. This is your braced "anchor" from which the cable is pulled laterally across your back where your right hand holds the other handle for the actual press. Brace the anchor hand hard against the hip and press the right arm to full extension vertically overhead.*" This is a good exercise for the shoulder and triceps. There is no "anyhow" variant of this exercise, so make sure you maintain proper "military" positioning.

8 and 9: Two Arms Back Press, At Attention and Anyhow:

This press is a behind-the-back stretch performed in a lateral direction (both sides) until both arms are

fully extended. The back press is typically performed with the cables riding along the outside or top of the arm (see illustration); this version places greater emphasis on the triceps, and is one of the best triceps developers around. John Brookfield presents a variant with the cables passing under the arm, which tends to emphasize the deltoids. Either variant is excellent. This is an exercise where the cable positioning is conducive to huge pulls, therefore requiring more cable

resistance than any other. Again, loose style – "anyhow", strict style – "at attention".

10 and 11: Dislocation, At Attention and Anyhow:

To perform this exercise, start off in the ending position of a back press. The arms are stretched laterally in line with the shoulders. Keeping the arms straight, bring the cables upward until they are above your head, then over the top of your head and level with the clavicles (in other words, from the finishing position of the back press to the finishing position of the front pull). This requires a lot of shoulder flexibility and a "snap" of the cables can cause you some consternation, so start off with a light resistance and warm up thoroughly. Dipping the knees slightly to get the cables over your head is a popular method for the "anyhow" variation.

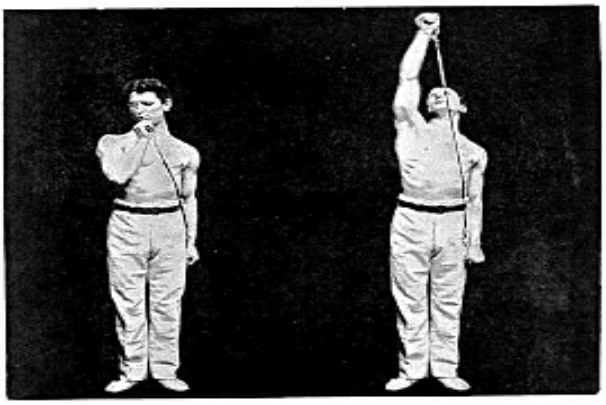
12: Two Arms Press from Behind Neck:

This exercise is performed like a back press, only instead of pressing laterally with the arms and upper back, press the cables to arms' length, then perform triceps extensions by bending the arm at the elbow (like barbell skullcrushers, only sideways), with the upper arm stationary.

13: Two Arms Upward Front Chest Pull, Feet Apart:

Like a regular front chest pull, only pull one cable handle upward and the other downward until the arms are fully extended (locked out). Again, arms should remain straight throughout the motion. Switch arms between sets. This variant emphasizes the front deltoid; you'll probably need to use less resistance than in the front chest pull. The "feet apart" element of the exercise is probably self-explanatory.

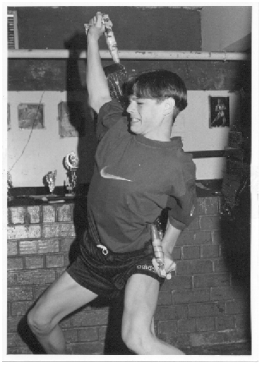
14: Right and Left Arm Front Chest Pull (in erect position):



As the Two Arms Upward Front Chest Pull, only keep the non-working arm extended (in the bottom position) and pull upward with the working arm.

15: Right and Left Arm Upward Push Anyhow:

This exercise is similar to a barbell push press and performed as the One-Arm Military Press, only without maintaining the "military position". In other words, you're allowed to dip the knees and jerk the cable handle from the shoulder. Positioning of the anchoring hand is the same as in Exercise 7.



The puller in this photo is **Garth Baxingdale**, only 16 years of age at the time the photograph was made, competing at an ISSA (International Steel Strandpulling Association)[8] event. It depicts the puller half-way through the movement.

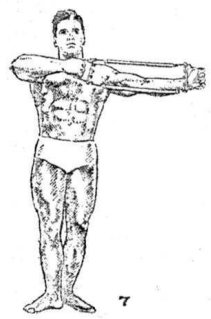
Regular practice of the competition pulls will result in strength and size gains, especially if you work with lots of resistance in the 5-10 repetition range. Singles, low-rep sets (below 5 repetitions) and even partials are also possible with cables – this will be covered in the "cable training methods" chapter. Due to the specific strain imposed by cable resistance, primarily the lack of energy expended for stabilization and support purposes (which is always present with barbell exercises), cable exercises can be performed for higher repetitions with good results. A table of repetitions and training goals is presented in a later chapter. Bear in mind that it is based on personal experience and preference, therefore do not take it at face value – experiment to see what works best for you.

Supplementary exercises are those practiced by strand-pullers and cable trainees for the development of strength for the competition pulls, but also increases in muscular size and shape. They can be summarized in the following table:

[8] Photograph courtesy of http://internationalsteelstrandpullingassociation.netfirms.com/

No.	Exercise Name
16	Archer Pull
17	One-Hand Curl
18	Reverse Curl
19	One-Hand Front Raise
20	One-Hand Tricep Press With Trunk Slightly Bent
21	Prone Front Chest Pull
22	Prone Front Chest Pull With Sit-Up
23	Prone Chest Pull With Leg Raise
24	Bent-Over Front Chest Pull with Trunk Raise
25	Wrist Curls From Front Chest Pull, Half-Way Position
26	Front Chest Pull With Squat
27	Neck Press-Out
28	The Whippet
29	The Shoulder Shimmy
30	Front Downward Pull, One-Armed
31	Front Tricep Pressdown, One-Armed
32	Pull-Over Exercise
33	One-Hand High Pull
34	Cable Front Squat
35	Front Press
36	Behind-the-Head Tricep Extension
37	One-Hand Behind-the-Back Lateral Raise
38	Multi-Directional Archer Pull (Earle Liederman's Exercise No. 2, Lesson 6)
39	One-Leg Pressdown (Earle Liederman's Exercise No. 5, Lesson 6)
40	Windmill / Side Bend
41	Hip and Thigh Pull

16: Archer Pull:



This is one of the staple chest expander exercises, and I was rather surprised to learn that it is not included in the list of competition pulls (perhaps other strand-pulling federations had different rules).

Holding a chest expander, press the **non-working arm** out, level with the shoulders. The other hand is in front of the shoulder of the non-working arm, like a bow before the string is drawn. Keeping the non-working arm stationary and both hands in level with the shoulders, pull with the other hand (like drawing a bow-string) until the working arm is fully

extended. The finishing position is like that of a front chest pull. Return slowly to starting position and repeat. This is a tremendous tricep builder.

17 and 18: One-Hand Curl and Reverse Curl:

To perform this classic biceps-builder, anchor one handle of the cable set underfoot. Keep the body straight and curl the working hand to your shoulder. Keep the wrist supinated (palm up) for the regular curl, pronated (palm down) for the reverse curl. The latter version engages the forearm and brachialis muscles more. The man in the image is Alfred Danks, author of one of the legendary cable training courses. He is seen here performing the classic One-Hand Curl.

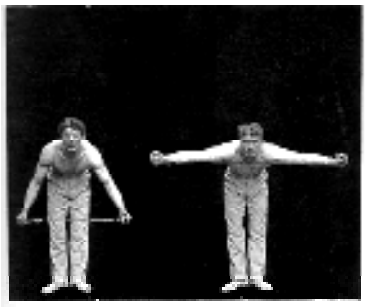
19: One-Hand Front Raise:

Anchor the cables as for the Reverse Curl (wrist pronated), extend the working arm downward to full lockout; keep it straight and raise the cable handle to slightly above shoulder level. Lower slowly and repeat. This exercise works the front portion of the deltoid and helps balance deltoid development from the competition pulls. It is inferior to the Front Chest Pull and Lateral Raise variations, but is a good method of strengthening the shoulder as preparation for the more difficult pulls.

20: One-Hand Tricep Press With Trunk Slightly Bent:

Assume the position as for the Right and Left Arm Military Press. Bend the trunk slightly **away** from the working arm and press the cables out to lockout. Now lower the cable handle by bending the arm backward at the elbow (engaging the triceps), with the upper arm remaining motionless throughout the movement.

21 - 26: Front Chest Pull Variations:



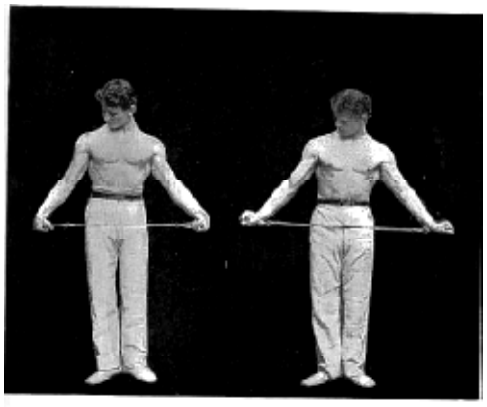
Prone variations: the Prone Front Chest Pull is performed like the competition pull, only while lying on your back. This dictates perfect style and isolates the upper back and deltoid muscles, so use less resistance.

Adding the sit-up is simple – stretch the cable as you're going up into the seated position, lower as you're returning to the prone position. The leg

raise is introduced in the same way: stretch the cable as you raise the feet (legs straight!), lower as you return them to the floor. These two exercises activate the abdominal muscles.

The Bent-Over Front Chest Pull with Trunk Raise begins with the trainee bent over at the waist, cables held in the FCP_4 position. Then the cables are stretched as in a FCP and the trunk simultaneously raised to erect position. This variation stresses the lower back muscles.

A good (if incredibly difficult) variant is the Front Chest Pull with knuckles in (back of the hands facing each other). You will really feel your back muscles work on this one. Use less resistance.



For the Wrist Curl variation, stretch the cables to the midpoint of a FCP and perform wrist curls in this position with both arms simultaneously. Muscles worked – flexors and extensors of the forearm. You can also perform this exercise with the expander stretched as for a lateral raise.

Front Chest Pull With Squat: a method of engaging the leg muscles and a popular exercise of old-time wrestlers. Stretch the cables when coming up from the squat, return to starting position when squatting down. If you're really strong, you can do these on one leg at a time ("pistols").

27: Neck Press-Out:

Stand upright, cables behind the back and resting against the back of your neck. Knuckles are facing inward. Stretch the expander laterally to arms' length, then bring arms forward, resisting the cables with your neck. Once you get the hang of this exercise, it becomes a tremendous neck-builder.

28: The Whippet:

Use a light cable set and press it out in a back press motion. Relax the shoulders and pectorals and pull the arms backward as far as possible under the tension of the cables (i.e. let them "drift" away from the back), then bring them forward until they touch the upper back again. This is a stretching exercise, excellent for shoulder flexibility. When bringing the cables forward (i.e. to the point where they touch the upper back), you can continue the motion and pull them slightly forward, as in a chest fly motion.

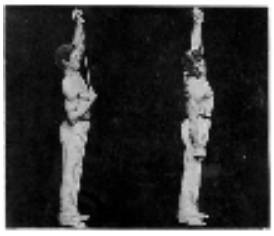
29: The Shoulder Shimmy:

Perform a heavy back press and hold the cables out at full extension. Contract the shoulder blades together while keeping the arms outstretched; in other words, you're shortening your arm span without bending the arms. Now extend the arms as far as possible through an effort of the scapular muscles. At first the range of motion will be minimal, but as you obtain better control over these muscles you can double the ROM. This exercise develops the countless small muscles that lie between the shoulder blades. I recommend it to anyone who also practices heavy pressing exercises with weights, for upper back (and consequently shoulder) health.

30: Front Downward Pull, One-Armed:

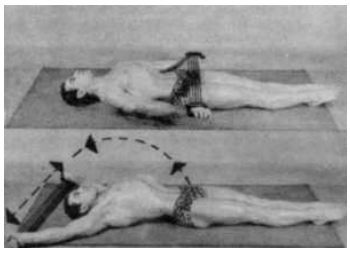
Hold the non-working arm (the anchor for the cable) extended overhead, slightly in front of the body. Grasp the free handle with the working arm; keeping it straight, pull the handle down, across the body and to the hip on the working-arm side. A good exercise for developing the latissimus dorsi muscles and triceps (if the working arm continues to travel past the hip and backwards).

31: Front Tricep Pressdown, One-Armed:



Set the cables up as for Exercise 30, only bend the working arm at the elbow. Keeping the upper part of the working arm straight, press the cables down to the hip and further back. Emphasize the end contraction and hold it for a couple of seconds before returning back to starting position. This is similar to a tricep pushdown exercise performed on a cable pulley stack.

32: Pull-Over Exercise:



This is a variant of the pullover performed with a barbell or dumbbell. Excellent for the development of the torso muscles. Start the movement in a prone position on your back. The cables are held across the front of the body (thighs). Now stretch the cables keeping the arms straight (like a Front Lateral Raise), simultaneously raising your arms above the head; the

cables reach a full stretch above your head. Inhale deeply as the cables are traveling upward. Bring them back to the starting position across your thighs, exhaling on the way down. Perform for high repetitions.

33: One-Hand High Pull:

Anchor one end of the cable underfoot. Grasp the other handle with a pronated grip (palms downward) and pull the handle to chin level. Lower, repeat, then switch arms. A great upper back / trapezius developer.

34: Cable Front Squat:

You will need a rod or broomstick for this exercise. Anchor one cable handle underfoot and place the stick through the other handle. Grasp the handles with both hands and hold it across your collarbones. Maintaining the torso erect, perform squats against the combined resistance of your bodyweight and the cable. This exercise could be tricky to learn at first. Switch anchoring feet between sets to work both legs equally. Alternatively, just hold one handle close to the chest and perform squats.

35: Front Press:

Hold the expander handles at chest level and press laterally – like a back press performed in front of the body. It is not a Front Chest Pull, so don't turn it into one. A potent developer of the pressing muscles, although you'll be handling far less resistance than in the back press.

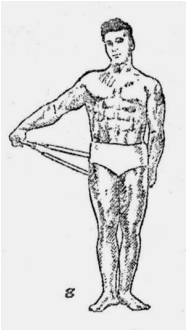
36: Behind-the-Head Tricep Extension:

A great isolation exercise for the triceps. Hold the non-working arm close to your side, extended downward, hand grasping an expander handle. The working arm grasps the other handle and holds it at the side of the head, palm facing downwards. This is the starting position. From this position, extend the working arm so that the cables are stretched upward; the upper arm should not move.

This is best explained by means of the illustration on the left, taken from the Reg Park cable

course. For those who've never heard of the name, Park was a legendary bodybuilder and the second man to bench press 500 lbs. He was one of the foremost cable training personages, a powerful weightlifter and splendidly built. If they worked for him, they'll certainly work for you.

37: One Hand Behind-the-Back Lateral Raise:



Hold the cable as for the Two-arms back lateral raise, but one arm should remain stationary while the other performs the pull. Switch arms between sets, or alternate pulls (i.e. a few reps with the left arm, then a few with the right).

This exercise is a powerful deltoid developer. Use it as a substitute for the two-arms variety, or perform it at the end of a shoulder-dominant workout. It works very well when combined with weight-lifting exercises for the shoulders.

38: Multi-Directional Archer Pull:

A variation of the standard Archer Pull, this exercise involves performing the pull in different directions

in succession. The trainee holds the expander as for the Archer Pull and performs one repetition, then changes the position of the arms diagonally to the body at various angles (as demonstrated in the illustration) and performs one repetition at each position. Then switch arms. The possibilities are manifold – do more than one repetition at each position, work clockwise, counterclockwise, etc. This exercise is taken from the Earle Liederman mail order course from the 1920s.

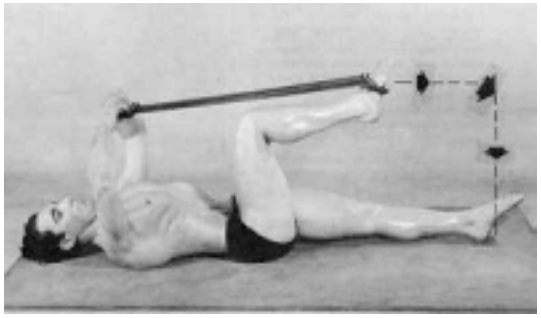
39: One-Leg Pressdown:

I will repeat that I do not find the chest expander leg exercises adequate for proper leg development, but these movements can be helpful in attaining greater muscularity in the thighs. To perform this exercise, hold one handle of the cable set with the arms and place the foot of the working leg in the other handle. Then proceed to push down with the foot in the handle, working against the resistance of the

expander. You can vary hand position to get more resistance out of the cable (the longer it has to stretch, the greater the resistance) and hit different muscles in the arms and shoulders. Your arms might tire before your legs.

Another variation, preferred by the author Earle Liederman, is performing a circular ("bicycle") motion with the foot. This is in fact shown in the illustration (note the circle).

The exercise can also be performed from a prone position, like this:



40: Windmill / Side Bend:

Hold the expander set across your back (as in a completed Back Press position). Bend over at the waist bringing the right hand to the right foot; the left arm maintains its position, i.e. goes straight up.

Return to starting position. This is one repetition. Now do the same for the left hand / left foot. Repeat for high repetitions.

41: Hip and Thigh Pull:

Hold the cable set against the back of your thighs, standing straight. Now bend forward at the waist and at the same time press the cable handles as far out as possible. The end position of the exercise is illustrated in the photo. Return to starting position and repeat.

That covers exercises with a chest expander. The list is by no means comprehensive – I'm sure that there are plenty other cable pulls that I've failed to include here. Again, strive to build on the knowledge contained here and share the information. On the other hand, practicing the abovementioned 37 exercises on a regular basis will bring about great changes in strength and development. In reality you won't need more than 10 or so. Try to get as strong as possible in the "big" pulls and gains will follow.

Some of you will note that I have not included any of the standard chest expander leg exercises in the list. To be honest, I find these rather ineffective for leg development; they also tend to work the grip/arms more than the legs, as they usually rely on the arms anchoring the handles while the legs perform stretching movements. Given that your arm muscles are smaller and weaker than the leg muscles, it is only obvious that they fatigue more quickly and that the legs can press far more than the arms can support. In this manner the legs are somewhat "short-changed" by the performance of these exercises.

For ultimate leg development, perform heavy movements with weights as a supplement to your cable training. For the "purists", I have devised a number of leg exercises that I find better suited for developing leg power. The only worthwhile exception would be the Cable Front Squat. Front Chest Pulls with Squats or Pistols are also good exercises for leg development, but they will not yield the results that weights could.

The length of Lifeline's TNT cables can be altered to allow for different uses. I loop the plugged cables in a single handle (i.e. both ends of a single cable into the same handle) and perform chest expander exercises. However, I sometimes use them for their intended purpose as well. This would bring us to the topic of simulations of barbell and dumbbell exercises with cables. I told you these cables can be used for everything!

What follows is a list of cable exercises that can be used to simulate weightlifting movements, for diversified strength. No, doing these without practicing actual weightlifting won't make you stronger in the barbell/dumbbell exercises, but there will be some carryover. Perform them as part of a cable routine that also uses competition pulls, or on their own. They will add a unique "twist" to regular weightlifting exercises. Descriptions are less detailed, as the trainee will probably be more or less familiar with the associated barbell/dumbbell exercises.

Some of the exercises require a door attachment – this comes included in the TNT cable set. If using a different cable set, you'll need to make your own. This can be done in a few simple steps:

1. Find a medium-length piece of a relatively thin, flexible, durable material. The TNT attachment is made from webbing; I found that this is optimal, but a judo or karate *gi* belt works just as well. Thin rope could also work well.

2. Tie a knot in the belt/rope, the way you would tie a neck-tie. Don't tighten the "noose" part all the way; leave a loop in the belt/rope. This type of knot is adjustable, i.e. by drawing one of the ends of the rope you can increase / decrease the size of the loop.
3. Find a door that closes **toward** you.
4. Place the knot over the other side of the door (practically, in the other room). The loop should be hanging towards you from above or the side (depending on placement). Close the door and lock it to make sure it won't open under the pressure.
5. Thread the cables through the loop and start exercising.

No.	Exercise Name
42	Double Shoulder Press
43	See-Saw Shoulder Press
44	Jerk Overhead Press
45	Standing Lunge and Press
46	Kneeling Press
47	Latissimus Pulldown
48	Squat and Pull
49	Tricep Overhead Press
50	Tricep Pushdown
51	Two-Arms Bicep Curl
52	Two-Arms Reverse Curl
53	Two-Arms Hammer Curl
54	Concentration Curl
55	Wrist Curl
56	Good-Morning Exercise
57	Overhead Squat to Box
58	Overhead Lunge
59	Zercher Squat
60	Ballistic Squat
61	Seated Hamstring Curl
62	Deadlift (One and Two-Arm)
63	Hip Lift (Hand-and-Thigh Lift)

42: Double Shoulder Press:

Step onto mid-section of cables and grab the handles; your feet should be spaced wide enough to provide you with a stable base to press from - shoulder-width is a good guideline. Clean the handles to your

shoulders and press them either simultaneously or alternately. You can make this exercise more difficult by spreading your feet outward (hence the length of the cable that is actually pulled is shorter and requires more resistance to stretch). The opposite movement makes it easier (e.g. for a military-type press less resistance is employed). Make sure that the lengths of cable running from each foot to the corresponding handle are equal, otherwise the resistance will be different on each pressing arm.

43: See-Saw Shoulder Press:

As above, only press the handles alternately and bend the torso slightly **away** from the working arm on each press.

44: Jerk Overhead Press:

As double-shoulder press, but performed with a quick dip of the knees before the pressing part to gain momentum. More resistance can be used here than in the "strict style" presses. This is an excellent exercise to develop power and coordination of effort throughout the body.

45: Standing Lunge and Press:

Thread the cables through the door attachment, set at a height around your middle back. Face away from the point of attachment (so that the attachment is behind your back). Lunge forward until you can feel tension in the cables. Brace yourself to prevent the pull from the cables throwing you off balance backwards. Press the cables to full extension of the arms, then return to starting position (resisting the pull of the cables). You can press in all directions - straight ahead, upward or downward.

Pressing downward eliminates most of the back pull of the cables, therefore in this direction most resistance can be used.

46: Kneeling Press:

As above, only kneel on the floor instead of lunging forward. This is a safer version, as you cannot be "thrown back" by the cables. However, your torso muscles need to work extra hard to focus the effort on pressing, as the legs are take out of the equation. A great addition to any pressing workout.

47: Latissimus Pulldown:

With the door attachment set directly above you, grasp the cable handles and kneel/sit until your arms are fully extended and there is tension in the cables. Look up and pull the cables downwards using your latissimus muscles first, then your arms. The arms are moving in a semi-circular line from the fully upward-extended position to the sides of your thighs (not just the clavicles, like on a lat pulldown machine). Hold the contracted position (you'll should feel a strong contraction in the latissimus dorsi), then reverse. Repeat. Properly performed, this exercise should resemble an upside-down lateral raise.

48: Squat and Pull:

Thread the cables through the door attachment, set at a height around your middle back (below sternum). Face towards the point of attachment and walk backwards until you feel tension in the cables when your arms are completely extended. Brace yourself to prevent the pull of the cables from throwing you off balance forward. Pull the cables into your torso, then back into starting position (resisting the opposing pull of the cables).

49: Tricep Overhead Press:

As the Double Shoulder Press, only keep the upper arms stationary and bend the arms at the elbows.

50: Tricep Pushdown:

Cable setup as for the Latissimus Pulldown, only performed standing, by bending the arms at the elbows and pushing down on the handles. Essentially like a Front Tricep Pressdown, but with two hands and with the cable attached above the head (not locked out with the non-working arm).

51, 52 and 53: Two-Arm Bicep Curl and Variations:

Step onto mid-section of cables and grab the handles with a supinated grip (palms facing upwards); your feet should be spaced wide enough to provide you with a stable base to curl from - shoulder-width is a good guideline. You should feel tension in the cables with your arms fully extended downwards. In a smooth, controlled motion curl the handles into the arm-flexed position and lower slowly. Repeat.

Reverse curl: As above, only grab the handles in a pronated grip (palms facing downwards).

Hammer curl: As biceps curl, only thread a short towel or rope through the handles and grip it in a neutral grip (palms facing each other). Curl to arms-flexed position, lower and repeat. This exercise has a shorter ROM as the hands are not on the handles, but on the extensions.

54: Concentration Curl:

This exercise requires a shortened chest expander set. With the Ironmind set or any set with looped strands, simply shorten the loops. With the TNT cables, I loop a cable around a single handle like for the expander exercises, then double it up again and perform the exercise holding the handle and "bend" of the cable in the same hand.

Resistance here increases suddenly (as you're essentially stretching the cable beyond its recommended length), and moving up to the next stronger cable is difficult as a 10-lb. difference is essentially multiplied by 4, providing a significant jump in poundage.

Anchor the shortened cable set underfoot. Sit on a chair or bench and press down firmly with the foot on the working side, hand still holding the cable. The shortened cable is now half its length. Place the elbow of the working arm against the inner thigh on the same side and curl the handle towards your shoulder. Lower and repeat.

This exercise hits the biceps hard and helps you achieve a "peaked" look, if you believe in muscle shaping.

55: Wrist Curl:

Cable setup as above. Place the supinated (palm up) hand so that it hangs over the knee on the same side and perform wrist curls. Can also be used with the pronated grip, in which case use less resistance.

56: Good-Morning Exercise:

Step into a looped cable (this cannot be performed with a chest expander set). Place the bend of the cable across your back and step onto the other end with both feet. Keeping the back straight, bend forward from the waist until the upper body is parallel with the floor, then straighten up again. Repeat for high repetitions.

57: Overhead Squat to Box:

Step onto mid-section of the cables (feet comfortably wide, probably double shoulder width). Place a low box under your behind, set at such a height that allows you to lower yourself down into the wide-stance squat position (feet flat on the floor, top of knee below hip crease) when sitting on it. While on box, grab the handles and press them upward (like a shoulder press). Lock your shoulders, triceps and lats to keep the handles in arms-extended position. Holding the handles in the pressed position, squat up until erect. Pause briefly, then lower yourself back down maintaining the pressed position, making sure you touch the box at the bottom of the movement. Repeat.

58: Overhead Lunge:

Get into top of lunge position and step on the mid-point of the cables with one foot (cables are placed in front of you so the line of your foot and the line of the cables form a "T"). Lunge down, then grab the handles and press them out as described above. Maintaining the pressed position, perform lunges with the cables adding tension onto your working leg. Alternate legs for equal amount of reps, equal strand tension.

59: Zercher Squat: Step onto mid-section of the cables (feet comfortably wide, probably double shoulder width). Place a low box under your behind, set at such a height that allows you to lower yourself down into the wide-stance squat position (feet flat on the floor, top of knee below hip crease) when sitting on it. While on box, pass your arms thought the handles so that the holds rest in the crook of your elbow. Hold arms at sides with arms either locked together or turned upward, to prevent the handles from slipping. Squat up from this position, locking the legs at the top of the movement, pause briefly and repeat. Alternatively, do not lock out at the top of the movement or drop to the bottom - just do continuous limited-range squats to pump the legs. This variant of the cable-resisted squat places more stress on the quadriceps muscle and front abdominals than the others.

60: Ballistic Squat:

Pass the cables across your upper back and step onto the handles. The diameter of the handles will force you on your toes. Lower yourself to just below parallel, then explode back up to a full stretch of the cables. Drop back into the low position and repeat. Maintain speed throughout the movement.

Given that the thickness of the handles forces you on your toes and hence makes balancing harder (especially when maintaining speed of the movement), it is advised to hold onto a fixed object with your hands for balance. This enables you to perform the movement with speed. At the top of the movement the resistance in the cables is very high and produces an excellent "burn" effect. High-rep sets, as in 15 and above, work great. They condition the lungs as well as the legs. Another most important exercise for grapplers.

61: Seated Hamstring Curl:

Thread a single cable through the door attachment and plug the free end into the same handle (so the result is a shortened cable). Walk back until you feel significant resistance in the cable. This is the "extended leg" position. Now place a chair a foot or so behind that point and place your leg into the inner space of the cable. Sit onto the chair, maintaining resistance in the cable. There should be tension in the cable in the extended position. Now curl your leg slowly until it's at 90 degrees to your body, lower back and repeat.

62: Deadlift:

Take two looped cables and place them on the floor, the opposite ends of each cable on the same side (e.g. handle of cable 1 and bend of cable 2 on the right, handle of cable 2 and bend of cable 1 on the left). Step onto the cables, making sure the free section of the cables on each end (between the foot and the handle) is of equal length. Bend down, grasp the handles and bends on either side and pull.

One-armed variety: Double up a shortened cable. Step onto the two newly formed bends with the foot of the working side. Squat down and grab the handle with the working hand. The starting position is a semi-squatting pose with the working arm extended fully, cables relaxed. Now straighten up, maintaining the extension of the arm (so you're pulling with your legs and back mostly). Stand up straight, then repeat.

63: Hip (Hand-and-Thigh) Lift:

As for the deadlift, only start the movement from about knee-level. You can use a LOT of resistance in this exercise. Great for developing the muscles of the posterior chain and grip.

That would cover the exercises with long cables (i.e. not chest expanders). For some of these exercises the Lifeline TNT product reigns supreme, as the tubing is pretty long and stretches to a length of 6 ft., and the handles are solid plastic, which allows for better force distribution and bigger pulls. For the leg work variations, the flat bands made and promoted by **Dick "The Band Man" Hartzell** would be much more appropriate. I think these are available through Ironmind. Hartzell also markets a special platform that enables you to loop several strong bands and perform squats and deadlifts / hip lifts, so this would certainly be a valuable addition to your home band gym. I have read that the tension at the locked-out position of a band squat performed with this setup can go up to 600 lbs., so you can only imagine the developmental effect of a hard set of 20 breathing squats done on this platform.

Finally, there is the "everything else" category. Here you can invent exercises of your own: just think about how a particular muscle works, then consider how to resist that motion with cables. If you're not feeling creative, here's a brief list of exercises that I've come up with:

No.	Exercise Name
64	Judo Throw
65	Isolation Latissimus Pulldown
66	Prone Bicep Curl
67	Sled Dragging, Arms Extended
68	Sled Dragging, Arms Crossed
69	Vertical Cable Crunch
70	Cable-Resisted Push-Up
71	Chest Press
72	Floor Press
73	Bridge and Press
74	Cable Pull-Apart
75	Knee Extension
76	Face Pull
77	Cable Punching
78	Cuban Press
79	Cable-Resisted Crawl
80	Cable-Resisted Seated Abdominal Crunch/Sit-Up

64: Judo Throw:

With the cables set up as for the Squat and Pull, face the attachment and walk back until you feel tension in the cable. Now perform a "throw" as follows (if throwing to the left): left arm - pull and press the cable handle downwards; right arm – elbow reaches under the handle to help lift off the imaginary opponent, press the handle upward, then turn to the left side and press forward; hip action (simultaneous with the arm work) - twist the right hip toward the left (pivoting around the left hip) until facing in the throwing direction (left side, looking backward), body tilted forward at the lower back; legs - right leg crosses in (about half distance from the cables) and serves as a pivot for the twisting motion, at the end of the movement toes face in the throwing direction (left and back), left leg moves toward the right leg and finishes the "driving" motion, or extends up toward the area between the handles and serves as a lever to move the imaginary opponent up and over the left hip.

This is a great conditioning exercise; it develops not only the muscles per se, but also coordination and agility (as the resistance of the cables is similar to the resistance provided by an opponent). Stability and balance are also developed. For grapplers, the importance of this exercise need not be emphasized. Perform the standard or towel variations (by placing a towel through the handles and pulling on that instead). It is important to coordinate the movements described into one fluid motion, retaining balance throughout. End with the arms, back and legs powerfully contracted against the resistance of the cables. This is one throw. It will take most people (even experienced grapplers) some getting used to, as the pull of the cables in the contracted position is enormous.

65: Isolation Latissimus Pulldown:

This is essentially a latissimus pulldown... with a twist. The door attachment setup is identical, only instead of grasping the handles place your arm between the cables at the point of attachment of the plugged ends into the handle so that your triceps rests on the handle. This is better performed with flat looped bands you simply place the arms inside the loop. Perform pulldowns as before, only this time you're not using your arms (just contracting the latissimus dorsi).

66: Prone Bicep Curl:

Lie on the floor on your back and place the cable set across the bottoms of your feet. Grab the handles and fully extend your arms. Now curl the handles to your shoulders; your upper arms and upper back should remain in contact with the floor throughout the movement. Hold contraction in the peak position, lower slowly and repeat. Prevents any form of cheating on the curling exercise.

67 and 68: Sled Dragging Variants:

Arms extended: Thread the cables through a door attachment set almost at ground level. Face the door, arms extended, holding the cable handles. Now walk backwards; you will feel the tension in the cable increase. You can "sit" back a little in order to stretch the cables as far as you can. Once further movement is impossible, hold the position and slowly walk back until the cables are slack. This is one repetition. Repeat for a desired number of repetitions, time, or at certain speed.

Arms crossed: as above, only cross your arms after grasping the handles, or thread your arms through the handles and cross them tightly against your chest.

69: Vertical Cable Crunch:

Place the door attachment strap on the top of the door and secure. Thread a cable through the attachment. Face the door and hold the handles to your chest. Now crunch the top of your body downward, working against the resistance of the cables. Make sure your hands aren't moving or working against the cable resistance! They are there simply as an anchoring point. Hold the bottom position and squeeze your abdominals, then come up and repeat. Perform high repetitions.

70: Cable-Resisted Push-Up:

Again, this works better with flat looped bands, but can also be done with cables. Simply place a cable around your back (so that it passes under your arms), assume push-up position and press down on the ends of the cable. Now perform push-ups.

Vary the resistance by adjusting your hold on the cable ends. Best performed for high-speed sets of 15-20 reps.

71 and 72: Chest Press and Floor Press:

Chest Press: Best performed with a chest expander set. Start this position like the Two-Hands Back Press. Instead of pressing the cables out laterally, pass the handles under the armpits so that you're pressing them forward (like a standing bench press). Press to arms' length, then return slowly. Repeat.

Floor Press: Same as above only performed while lying on the floor. The ROM of this exercise is shorter than that of the Chest Press (as the arms cannot move further back than the floor), so this variation will stress the triceps more.

73: Bridge and Press:

As the chest / floor press, only get into a wrestler's bridge first, then hold the bridge and press the expander handles perpendicular to the torso. You can also practice bridging before each press. A superb compound exercise, it stresses the posterior chain, neck, shoulders, triceps and pectorals.

74: Cable Pull-Apart:

Grab the cable (no handles) as for a Front Chest Pull (arms extended in front, shoulder width, 3 and 9 o'clock positions on an imaginary clock face). Stretch the cable as in a front pull until it touches your chest, hold briefly and return to starting position. Perform for high reps. This is a rehab/ prehab exercise that ensures shoulder health.

75: Knee Extension:

Thread cable through the attachment as above. Now walk backwards until you feel resistance in the cable, then place your foot against the inside of the bend. Your working knee is bent slightly. Straighten your knee against the resistance of the cable, then relax; this is one repetition. Repeat for high repetitions.

76: Face Pull:

Set the door attachment at face level. Thread cables through door attachment loop, grab handles, face the attachment, walk backwards until you feel tension in the cable (with arms outstretched), and pull the handles toward your face. Hold contracted position briefly, return to starting position and repeat.

77: Cable Punching:

Attach cables to a door attachment and face away from it. Hold the handles and walk forward until you feel tension in the cables, then assume a fighting stance and throw punches against the cable tension. Commonly performed either for speed or for rep total. I am no boxer, but I have read that this develops great punching speed-strength.

78: Cuban Press:

Step on one end of the cable and grab the free end with the working arm (on the same side of the body). The fist of the working arm is turned knuckles-down to the floor. Raise your upper arm until it is at right-angles to the body, and the forearm is at right-angles with the upper arm. Without moving the upper arm, rotate the forearm in a 180-degree arc (i.e. until the knuckles of the working arm are facing upward). The forearm of the working arm remains at right-angles to the body throughout the movement.

79: Cable-Resisted Crawl:

Set the door attachment to a low point on the door. Face away from the door and pass your arms through the cables (the cables should come up almost to shoulder level). Now crawl on your hands and knees until the tension in the cable makes further movement impossible. Back-track carefully and repeat. Perform for time or for repetitions.

You can also perform pushups or explosive pushups in the "cable stretched" position. Be careful or the cables might slip from your arms and cause some damage/pain. This is an excellent total-body conditioner. If you feel up to it, perform a few pushups or plyometric pushups at the stretched position. Your muscles are fighting gravity (down) and cable tension (back), and the combined effect is something you've probably never experienced before.

80: Cable-Resisted Seated Abdominal Crunch/Sit-up:

Set the door attachment to a low point on the door. Sit down on the floor/ground, back facing the point of attachment. Hold the handles or ends of the cable behind your head. You should position yourself in such a manner that there is tension in the cable when you are sitting upright. Then proceed to crunch forward, using ONLY the strength of the abdominal muscles. Hold the fully contracted position (like the end

position of a sit-up) for a couple of seconds, then go back to starting position. You can also do a full sit-up, but be mindful of the resistance "kicking in" suddenly once you get past the seated-upright point.

The eighty exercises listed above are more than enough to develop every muscle in your body. Naturally, you won't be performing *all* of them as a regular training routine, or even on different days. I provided them for variety purposes. In my opinion, practicing the competition pulls (not all of them, or at least not at once!) and 5 - 8 supplementary strandpulling exercises, along with a few barbell exercises targeting the lower body, would provide the best overall development. Alternatively, lower-body cable exercises can be substituted if one does not have the inclination or the possibility to train with weights.

Bodyweight exercises can and should be practiced as part of any balanced routine, and the same goes for cable training. The following chapter will provide more information on combining cables with other forms of exercise.

Combining Cables and Other Training Tools

Cables are a great strength and size development tool. They will also tone existing muscle mass and help you obtain the "shredded" look. However, cables will not help you lift heavier weights, or be more proficient with difficult bodyweight exercise progressions. It is my opinion that, for greatest diversified strength, you need to include all these training methods into your exercise schedule.

Cables fit into a weight-training schedule easily. The resistance they provide is quite different than that of heavy weights for three reasons. One, cables offer resistance in all planes of motion, while a barbell is subject to gravity, i.e. the resistance is always acting vertically downward. Two, cable resistance increases the further the cable is stretched, while the weight of the barbell remains the same and in fact offers *less* resistance toward the lockout part of the motion due to more favorable leverage. Three, cable pulls don't stress the entire body the way heavy barbell exercises do, as they do not require hard work on behalf of a myriad of stabilizer muscles just to keep the body in the lifting groove.

Due to these considerations, it is quite possible to train with cables and weights on alternating days, or even on the same day, or even *in the same session*. This does not mean that you should go all out and perform random exercises; exercise selection will depend on the specific goals of the trainee. These goals can include:

a) Focus on strand-pulling exercises;
b) Focus on weight training, supplemented with some cable exercises;
c) Bodybuilding-type training with cable exercises thrown in for muscularity.

Focus on strand-pulling exercises with barbell/dumbbell exercises added in for diversified strength:

The best barbell/dumbbell exercises for use with a comprehensive strand-pulling program are as follows:

No.	Exercise Name
W1	Barbell Power Clean & Press
W2	Barbell Power Clean
W3	Barbell Overhead Press (from rack, without clean)
W4	Barbell Back Squat
W5	Barbell Front Squat
W6	Barbell Deadlift or Hip Lift
W7	Dumbbell Swing
W8	Barbell / Dumbbell Bicep Curl
W9	Dumbbell Overhead Press

Again, there is no need to do all of these exercises; just pick ones that compliment the cable pulls you've selected. The most logical choice would be a version of the squat (back or front), power clean or power clean & press, deadlift and bicep curl, but any other combination also works well. Adding some heavy leg work is essential.

As for the training session distribution, there are two basic templates: either do the weight two to three times a week (two if you're using heavy weights), then add two to three strand-pulling sessions in the same week, allowing one to three rest days, or do combined weights and cable pulling sessions. The exact parameters of the weight-lifting part program would be up to the strand-puller.

Again, I turn to the Syd Devis material (who knows better than a strand-pulling champion?); his book suggests the following routines[9]:

Course A

1. Overhead Downward Pull, knuckles inwards
2. Overhead Downward Pull, knuckles outwards
3. Two Arms Lateral Raise (back and front)
4. Right and Left Arm Front Chest Pull (anyhow)
5. Two Arms Front Chest Pull, At Attention
6. Two Hand Press with Barbell (a.k.a. barbell overhead press)

[9] Devis, Syd: *All About Strandpulling*, provided courtesy of the Strandpulling Message Board. Original book published cca. 1940, quoted information from reprint from 1950.

7. Two Hands Snatch with Barbell (if you're not familiar with the snatch, replace with Dumbbell Swing – less technical and just as beneficial)
8. Two Hands Curl with Barbell
9. Right and Left Arm Military Press
10. Two Arms Back Press At Attention
11. Dislocation At Attention Position
12. Two Arms Press from Behind Neck
13. Two Arms Front Chest Pull (anyhow)
14. Prone Front Chest Pull
15. Front Chest Pull with Sit-Up
16. Prone Front Chest Pull with Leg Raise
17. Bent-Over Front Chest Pull

This is too much for the beginner, obviously designed to be used by an advanced athlete. Devis recommends one set of each exercise, starting with a resistance / weight you can pull / lift for 5 reps and increasing repetition numbers whenever possible; once you get 10 reps, increase resistance / weight used slightly and start back at 5. It will develop superb strength, size and shape if practiced regularly. He suggests this regimen to be performed 4 times per week. You could do it on alternating days, i.e. work one day, rest the next, etc. 17 exercises seems like a lot, but then again it's only 17 sets overall. Many bodybuilders do more than 17 sets just for the biceps.

I will present another Syd Devis cable / weights routine (actually, the one that you're supposed to do after one month of the above routine) in the following chapter. This was merely presented for illustration purposes – how you can combine weight training and chest expanders.

Focus on weight-training, with strand-pulling exercises added in for diversified strength and / or joint health:

I have mentioned this before, but it's worth repeating: weight training does **not** damage one's joints. However, certain exercises do place the joints in potentially hazardous positions, and if the small stabilizer muscles are not strong enough you have trouble brewing. The bench press is a classic example: through abuse of this exercise, many lifters end up having to call it quits due to shoulder pain. Cables are

great for strengthening these stabilizers, and for providing resistance to muscles from other angles, not just "down" as weights do.

This is where alternating weight-training with cable-training days comes in handy. This way you're able to get the most out of weight training, recover, then hit the cables on a separate day and focus on working the muscles that are also involved in weight training. The difference between doing the course outlined above and this type of training is that you use moderately heavy to heavy weights, but perform more than one set (as you don't have to spare the energy for heavy cable pulling). Then on the cable-training days you use less resistance and focus more on range of movement and strengthening of particular muscles. All chest expander-type exercises are good for this purpose – there is no need to perform exercises that simulate weight-training movements. Give this a try; if you're a weight-lifter, you'll find that your strength will increase and that you're more injury-free than before; if you're just interested in getting strong, you'll find that cables and weights develop muscles capable of exertions in any direction.

The old-school weight training almost always included some so-called "tinkering" work, a type of active recovery training designed to stimulate the body, yet provide a break from heavy on-the-nerve training. The York Barbell courses published by Bob Hoffman were (and remain to this day) are a great example of this. They advised the determined weightlifter to practice "one thousand and one" exercises from complete, all-round development of strength and health, but also the aesthetic aspects of one's physique. Remember, they were written back in the era where bodybuilders also had strength to go along with the muscles, and weightlifters didn't look like obese, red-faced, refrigerator-sized bald dudes with tattoos and goatees. York's **Tommy Kono** and **John Grimek** were superb physical specimens, capable of domination both on stage and on the lifting platform. York made and sold a bunch of different products to be used on these "tinkering" days – chest expanders, leverage bars, health boots, iron shoes and other assorted grip devices, etc. Of course, the focus of the courses was still on the improvement of weight-lifting capacities and heavy barbell training dominated the program; Hoffman never claimed that one should develop equal training time to **all** "1001" exercises, and this would indeed be counter-productive. If you choose to pursue heavy lifting, though, adding some cable work and bodyweight exercises into the mix will benefit your lifting greatly.

Another comment by Bob Hoffman on the importance of cable training for weightlifters and physique athletes:

"*Exercises performed with springs, rubber or elastics have proven their worth over a period of many years. They will produce a magnificent upper body, broad shoulders, broad back, rounded deep chest, and splendid arms. Years ago when the German weight lifting team, who were then world's champions, visited this country for a contest with our York team, they brought with them heavy rubber cables which they used regularly. Many winners of important physique contests have carried a set of cables with them everywhere they went, used them at every opportunity, and greatly improved their physiques with this form of training. John Farbotnik, Mr. America and Mr. Universe winner, started with cables alone, built his first extra 15 pounds of muscle with cables. He carried them with him everywhere and he feels that cables played a very important part in helping him win not only his big titles, but special awards of best chest, best back, and best arms as well.*"

The exact training template is up to you. Good weight-training programs can be found throughout the internet, and they're not the focus of this instructional. Sample cable workouts will be presented in the following chapter. Experiment with different ideas and find what works best for you.

Bodybuilding-type training with cable work thrown in for added muscularity:

This is an idea taken from **Dennis B. Weis**, powerlifter, bodybuilder and strength author. He suggests cable training for bodybuilders preparing for an upcoming contest. Most people reading this are probably not interested in participating in such contests, but a bit of extra muscle and definition will hardly hurt your goals, right?

The basic idea is this: add one or two high-rep sets of cable exercises at the end of every "bodypart" workout. E.g. if you're doing a chest / shoulder / triceps day (a common bodybuilding split), perform all your exercises, then do 1-2 sets of 10-12, or even 20 reps for each muscle group. This will produce an unusual muscle pump. There is no need to go overboard with exercise selection – here's a short list of the most effective exercises:

Chest – chest presses or front presses or front pulls

Shoulders – lateral raise (any variant), front chest pull

Triceps – one-arm front pushdown or tricep press

Latissimus dorsi – overhead downward pull, one-arm row

Trapezius – up-right row

Biceps – bicep curl, concentration curl

Quads – cable front squat

Hamstrings, quads – overhead squat or lunge[10]

Alternatively, for "pump and shape" purposes, cable leg exercises can be substituted with bodyweight "sissy" squats (a superb quadriceps builder, although people with knee issues should probably stay away from these) and / or lunges and Bulgarian split squats, both done without weights. The chest muscles are also pumped very efficiently with high-rep pushups, which will also have a positive effect on the tricep and front deltoid muscles.

Work the exercises until you feel a deep "burn" in the muscles. This is quite different from a "burn" obtained through exercising with weights. It will take your muscularity to new levels.

I have also decided to include some basic information about the ***Jettison Technique***, basically a drop-set variation where cables are added to a barbell or dumbbell exercise to provide a more intense muscular contraction at the top, or strong range of the movement (where in a regular weight-lifting exercise the resistance of the weight is often well below the force production capacity of the muscles involved, like in the top portion of a bicep curl). This concept was formulated by Dennis B. Weis, who in turn adopted it from fitness expert and writer **Ernest F. Cottrell**. The full Jettison Technique e-report can be downloaded for a small fee from http://www.criticalbench.com/jettison.htm. This is a part of it that I obtained for free through the internet.

As the name implies, this method has you "jettisoning" or "casting off" resistance during a set in order to enable you to squeeze out more repetitions. The use of expander cables / bands is a stroke of genius, because they increase the resistance greatly in that portion of a weight-lifting exercise in which the muscle is the strongest, where weight of the barbell or dumbbell provides less resistance due to the bodily

[10] This is a variation on the cable training ideas presented by Dennis B. Weis in one of his excellent articles, *Expander Cable Training*. For more information check out the full article at http://www.bodybuilding.com/fun/weis9.htm.

leverages of the lifter (such as the top position of a barbell bicep curl). This technique represents the final evolution of drop-set methods.

The basic premise can be summarized in the following manner:

- Pick a barbell or dumbbell loaded to about **60%** of your 10-repetition max in an exercise (e.g. bicep curl);
- Pick a rubber cable that you can use for 15 repetitions in the same exercise (e.g. cable curl) and secure it under your feet;
- Hold the combined exerciser (rubber cable and barbell) in the same hand (or both hands) and perform the exercise with this combined resistance. You should be able to complete **8 reps** with this resistance. Use lighter weights and/or cable if you cannot do all 8 reps;
- Once you hit failure, i.e. cannot complete more reps, let go of either the barbell or the cable and continue to "pump" reps with this decreased resistance until your muscles are incapable of another repetition.

Some modifications I would suggest:

- Use flat looped bands, not cables with handles. Unless you have hands like Andre the Giant, it will be extremely difficult for you to hold onto the barbell / dumbbell and the cable handle with the same hand, or hands.
- Alternatively, loop the bands around the bar – make sure the resistance distribution is equal on both sides (i.e. loop it evenly).
- Dennis also suggests placing 70% of the weighted resistance you're using on the bar and placing another 30% outside of the collars, secured by easy-to-remove clamps. This allows you to do reps with the combined exerciser, have a training partner remove the 30% on the outside, continue to do reps with just the cable and the original 70%, then do a second drop and only keep one implement, performing repetitions to failure.

I have not tried this exercise technique as I lack adequate cable equipment, but aspiring bodybuilders will probably find it an excellent addition to their training program.

As for bodyweight training, I won't present exercises or routines. Cables are a great addition to your current bodyweight training regimen: use them on their own, or to add resistance to basic bodyweight

movements, like pushups, squats, dips and even pullups. Such training sessions will work your body as a unit. If you're a beginner, you can also use bands and cables to assist you in the performance of difficult exercises. E.g. if pullups are too difficult, loop a rubber band around the pullup bar and place your feet on the bottom bend. The elastic nature of the cable will provide a lot of assistance at the bottom (the further it's stretched), while at the top of the movement the assistance will be minimal. Conversely, if you're a stud that cranks out pullups in the 20s, throw a cable loop around your shoulders and attach the other end to a fixed object; the band will provide more resistance as you progress toward the top of the motion. Again, chest expander cables are not the best option for this – use flat looped bands instead.

Always try to combine as many different forms of strength training into your routine as possible. Depending on your schedule, you might or might not be able to do **ALL** the desired exercises when you want, or as often as you want. This is understandable; just make sure you find some time for them, this week or a week from now.

Some Cable Training Workout Templates

Yes, I know... you're too lazy to design your own workout, or new to exercise and need some guidance. I've read this complaint often enough in various strength book reviews. People are always searching for the "ultimate fool-proof workout" that'll turn them into supermen/women overnight. Well, there is no such thing... but that doesn't mean that it's impossible to come up with some pretty great workouts.

I will present several different training methods in the following chapter. This one will contain the wisdom of old-time cable training authorities. Feel free to mix and match the two – cable training is a versatile tool.

The Syd Devis Championship Puller Courses[11]:

First Month Course:

1. Overhead Downward Pull, knuckles inwards
2. Right and Left Arm Front Chest Pull, anyhow
3. Two Arms Back Press, at attention
4. One-Arm Curl
5. Prone Front Chest Pull with Sit-Up
6. Overhead Downward Pull, knuckles outwards
7. Two Arms Front Chest Pull, at attention
8. Right and Left Arm Military Press
9. Two Arms Back Press, anyhow
10. Prone Chest Pull with Leg Raise

Do one set per exercise. Start at a resistance that allows for 5 repetitions to be performed, try to increase the number of repetitions by one per training session. When you work up to 10, add resistance and lower the reps back to 5, etc. This is called the "double progression method".

Bear in mind that the Devis courses were designed for the competitive strand-puller. The idea behind the preliminary courses is to prepare the puller for the heavier work to come in the future.

[11] Devis, Syd: *All About Strandpulling*

Second Month Course

1. Overhead Downward Pull, knuckles outwards
2. Right and Left Arm Upward Push, anyhow
3. Two Arms Press from Behind Neck
4. Reverse Curl
5. One Arm Front Raise
6. Two Arms Front Chest Pull, anyhow
7. One Arm Press with Trunk Slightly Bent
8. Prone Front Chest Pull
9. Bent-Over Front Chest Pull with Straightening of the Trunk
10. Wrist Curls from Front Chest Pull, Half-Way Position

Repetitions and sets as for the first course. Devis stressed the importance of performing the exercises in the exact sequence given and obtaining plenty of rest between the exercises.

For the intermediate to advanced trainee, he provided the following three courses, to be followed one after the other (i.e. after one month of Course 1, move on to Course 2, etc.):

Course 1	Course 2	Course 3
Right and Left Arm FCP, anyhow	Overhead Downward Pull, knuckles inwards	Right and Left Arm FCP, anyhow
Right and Left Arm Military Press	Two Arms Lateral Raise (back and front)	Right and Left Arm Upward Push, anyhow
Two Arms Back Press, at attention	Two Arms FCP, at attention	Two Arms FCP, anyhow
Dislocation, anyhow	Dislocation, at attention	Two Arms Back Press, anyhow
Right and Left Arm FCP, erect position	Right and Left Arm Upward Push, anyhow	Dislocation, anyhow
Two Arms Back Press, anyhow	Two Arms FCP, anyhow	Two Arms Press from Behind Neck
Two Arms Press from Behind Neck	Two Arms Upward Front Chest Pull, feet apart	Two Arms Upward Front Chest Pull, feet apart
-	Overhead Downward Pull, knuckles outwards	Right and Left Arm Military Press

There are fewer exercises in the more advanced courses, but the resistance employed is greater. Devis recommended starting off with resistances around 3/4 of your maximum for each pull, progressing in the same manner as before (5 reps – increase by 1 rep each session – once you get to 10 reps, increase resistance, etc.). The supplementary exercises have been excluded – for development purposes, I suggest you keep them. Either find a way to include them into the regular training sessions, or do them on their own, as a "light" day.

As a continuation of the previous chapter, here is the Syd Devis combined weights & cable course No. 2 (to be started after performing the first course for a month):

1. One Arm Curl (cable)
2. Reverse Curl (cable)
3. One Arm Front Raise (cable)
4. Two Arms Upward Front Chest Pull (anyhow)
5. Two Arms Back Press (anyhow)
6. Dislocation (anyhow)
7. Right and Left Arm Upward Push Anyhow
8. Right and Left Arm Front Chest Pull
9. One Arm Side Press, dumbbell
10. Deep Knee Bend (i.e. full squat) with barbell
11. Overhead Downward Pull, knuckles inwards
12. Two Arms Lateral Raise (back and front)
13. Two Arms Front Chest Pull, at attention
14. Two Arms Back Press, at attention
15. Dislocation at attention position
16. Two Arms Press, barbell
17. Two Arms Snatch, barbell
18. Two Arms Slow Curl, barbell (controlled bicep curl)

This being a very tough course, keep the reps down to 6 (still, only one set). Use a weight that limits you to 6 repetitions. In your next session, increase the weight (he advises 5 lb. increases) and try for 4 reps.

Once you get those, add 5 more lbs. and try for two reps. Attempt personal bests on the last training day of every week of this course. Of course, warm up thoroughly first.

This is an insanely tough routine, and I would not advise doing it more often than 3 times a week, with plenty of rest between the days and even between the exercises. This is especially important for stronger trainees, who will be handling heavy poundages in the lifts and pulls. Beginners might be able to do the routine up to four times per week.

The Brad/Jack Reid Body-Building Templates:

If you're not after becoming a champion strand-puller (I doubt that they still have competitions going), and for strictly developmental purposes, here is a suggestion by Jack Reid, a physical culturist of note who used cables exclusively in his training. For the advanced trainee, he suggested limiting the number of exercises to eight, but not just any eight... the ones he found most effective for development[12]:

1. Overhead Downward Pull (grip not specified – knuckles in or out)
2. One-Arm Curl
3. Front Press
4. Front Chest Pull
5. Neck Press-Out
6. Back Press, Two Arms (either at attention or anyhow)
7. Reverse Curl
8. Forearm Exercise (hold elbow to hip and perform wrist curls)
9. One Arm Press (military variant)
10. Archer Pull

The general set / rep guidelines are two sets, 10 reps per set. Exceptions are Exercise 1, repeated for 15 counts, and Exercise 8, for 20 counts. Both Jack and later his son, Brad, an accomplished all-round lifter and athlete, seem to recommend high-rep training routines, or at least the use of higher reps than normally prescribed by weight-training courses.

[12] Reid, Jack: *The Function and Use of Chest Expanders*, courtesy of the Strandpulling Message Board

Finally, a program provided by Brad Reid – the "Traveling Salesman" cable workout. It is simple yet effective, and focuses on the main exercises with chest expanders[13]:

No.	Exercise	Sets / Repetitions
1	Two Hands Back Press	2 warm-up sets of up to 5 reps, then 3 sets with enough resistance to limit first set to 10-12 reps
2	Overhead Downward Pull, knuckles inwards	1 warm-up set of 5-10 reps, then 3 sets with enough resistance to limit first set to 20 reps
3	Front Chest Pull	3 sets with enough resistance to limit first set to 12-15 reps
4	Lateral Raise, Front	3 sets with enough resistance to limit first set to 15-20 reps, then 1 set with extra resistance – perform a positive front chest pull, then lateral raise for the negative part of the exercise
5	One-Arm Curl	1 warm-up set of 5, then 3 sets with enough resistance to limit first set to 8-12 reps
6	Shoulder Shimmy	3 sets of 8-12 reps at maximum back press resistance
7	Whippet	3 sets of 10-12 reps at same resistance used for lateral raise

York Barbell Course No. 10 – the Chest Expander System

1. Front pull, knuckles out
2. Archer pull
3. Front pull, knuckles in
4. Diagonal front press
5. Front press
6. One-arm curl
7. One-arm row (as one-arm curl, only pull expander handle to chin)
8. Pull from above, knuckles out (overhead downward pull)
9. Pull from above, knuckles in
10. One-arm press (behind back)
11. Triceps exercise (as one-arm press, only perform triceps extensions with working arm)
12. Back press
13. Shoulder spread from back press position

[13] Reid, Brad: *A Primer on Cable Training*, courtesy of Fred Crivello's website

Yuri Shaposhnikov Chest Expander Routine

Soviet strength training authority **Yuri Shaposhnikov** (Юрий Шапошников) wrote a superb, comprehensive strength training manual titled *Sekrety Atletizma* (which my very marginal knowledge of the Russian language loosely translates as *The Secrets of Strength*, as the word "athleticism" is in this instance synonymous with strength). This book covers every aspect of strength training, from weights, girya, isometrics, freehand (self-resistance) exercises, to bodyweight exercises, stone lifting and exercises performed with three types of elastic resistance:

- The spring "crusher" – this is a single large spring with two handles on each end. Instead of pulling and pressing in different directions like one does with a chest expander, exercises with a spring expander mostly consist of bending and "crushing" the spring from different angles, in positions that resemble the bending of steel rods. A good example of this is the "Chest Crusher" made by York Barbell back in the day.
- A rubber cord, which is essentially like a latex loop (band) used to add resistance to barbells in powerlifting.
- Of course, chest expanders.

Professor Shaposhnikov had the following to say on chest expander training:

"*The expander is excellent for developing the strength of all muscles, especially those of the arms, shoulder girdle and torso. Chest expander exercises can either be used as a training method on their own, or as an addition to one's morning exercise routine [explained in other parts of the book; N: Fatman]. A home-made expander consists of a number of springs or rubber cords fastened to two handles. The quantity of springs can be varied to suit the physical preparedness of the trainee and the nature of the exercises performed.*

When training with an expander, do not forget about the principle of progressive resistance. At first it is sufficient to exercise with only one or two springs and perform one set per exercise. Once the trainee finds that he can perform the recommended number of repetition in each of the exercises easily, he should increase the number of sets, then the number of springs.

When performing the exercises care should be taken to return to starting position smoothly, following the resistance of the springs, not by suddenly slackening the muscles. Each exercise should be repeated 6-10 times."

Here are the best exercises in Shaposhnikov's esteemed opinion:

1. Front chest pull
2. Holding the expander at chest level, other handle under foot, perform trunk raises from bent-over position to back-leaning position
3. Overhead downward pull
4. Bicep curl
5. Back press
6. One-arm overhead press behind back
7. Archer pull
8. Front squat with two expanders – place feet through handles on either side of the body and hold the other handle of each expander at breast level with the corresponding hand

My translation from Russian is very likely flawed, so if you understand the language view the original text on the following website:

http://max-body.ru/book/training/sekrety-atletizma-jurijj-shaposhnikov/10.html

The Fatman General Cable Training Guidelines®:

In my opinion, the "Big Four" of cable pulling are as follows:

1. Two-Hands Back Press
2. Overhead Downward Pull (I prefer the knuckles-in version, or palms-out)
3. Front Chest Pull
4. Archer Pull

These exercises should form the core of your cable workout. As in other forms of exercise, as you become stronger you'll find that "less is more", in terms of sets, reps and exercises used. Of course, if your ambition is to progress in all the competition pulls, you have to train all of them, but this is not necessary for general development purposes.

Here's what my cable training sessions generally look like. I train with weights three times per week, focusing on low-rep sets with heavy loads and basic exercises – clean and presses, bench presses, deadlifts, squats, high pulls, weighted pullups and dips, with some extra assistance work thrown in time and energy permitting. In addition to this, I will usually perform one or two cable training sessions, a day of light high-repetition bodyweight exercises and routinely perform muscle control and visualized resistance exercises at random times during the week. So cable training is not my staple routine when I have time and access to a gym. It is when I'm on the road that they really shine, as they enable me to perform heavy workouts or just "pump and tone" without weights. Seeing how hotel gyms, even reasonably well-equipped ones, usually leave a lot to be desired, packing a set of handles and a couple of light rubber cables of varying resistances in your travel bag is essential to the travelling exercise addict. I have often used cables only for days, even weeks on one occasion. The longest period I've gone training with cables (and some bodyweight exercises) exclusively was around 25 days. I came back to the weights without having lost any strength and no need for "break-in" workouts. Granted, it wasn't a long layover, but I also managed to pack some weight to my frame (mostly non-muscle, but I retained some size after I had dieted the fat off).

In brief, my cable training sessions take one of the following three forms:

"Heavy" Cable Session:

This one focuses on the big exercises, relatively low reps (5-8, although I sometimes go as low as 3) and intense resistances. Typically, use a cable set that you could pull for 8-10 reps in an all-out set; this means that another set of 8-10 reps after the first one would be impossible. Pull the reps smoothly and evenly, pause a few seconds at the "top" of the movement, return slowly and under control (do not let the cables "snap" you back into position – if you lose control over the movement, you're setting yourself up for possible injury). Stop a few reps short of total muscular failure, since you're going to be doing more than one set. Do a few rest-pause reps if necessary to get all the target repetitions – pause the set, take a couple of breaths, shake the tension out of the muscles, get into position a pull a few more reps.

In my opinion it is always better to stop and re-focus briefly when approaching your limits than to compromise form. In weight-lifting you can sometimes benefit from "cheating" with compound exercises like bench presses and overhead presses, as it enables you to get a very heavy weight past a sticking point

and overload the strong range of motion. Such techniques are risky and should not be used by anybody except advanced lifters with a couple of competent spotters around. With cables, the resistance is not simply "up and down"; when you "cheat", you are essentially robbing your muscles of the training stimulus while setting yourself up for injury. The "anyhow" exercises do not constitute "cheating", although the great Alfred Danks held the opposite point of view and was very much against them. I don't do too many of those anyway, as I am not a competitive puller. For muscular development strict form is always better.

Aim for at least a few sets. Pace yourself so that the muscles stay "fresh" as long as possible. You can either do the exercises one at a time (e.g. overhead downward pulls for 3 sets first, then on to the back press, etc.), or run through them one set at a time (e.g. overhead downward pull for 1 set, then back press for 1 set, then the rest of the exercises in your program, one set of each, then start again at overhead downward pulls). I prefer the former option, as I like to get all the "heavy" exercises out of the way first. Also the small stabilizer muscles become fatigued when performing all the exercises, so hitting them again with heavy overhead downward pulls and back presses in this fatigued state can result in failure. The main reason is that I'm a lazy bastard and don't want to bother with changing resistances too frequently. If you're running out of resistance, however, and want to get a "pre-fatigue" effect going to make the big exercises harder, the latter method is better.

The "heavy" method allows for strength and some size development, and represents a good method of strength training with cables.

15/20-Rep Pump Method:

This one calls for a cable set of moderate resistance, say one that you can pull for about eight to ten solid repetitions. You pick a number of exercises and appropriate resistances and get to work. Once you hit temporary failure (i.e. the number of reps you can normally do with a cable set of the chosen resistance), you take a brief rest, perhaps 5-10 seconds, and try to pull a few more reps. Then rest again and repeat until you get the desired number of reps. This is called **rest-pause training** and is a very effective size development method, as you're exposing the muscles to much more stress than during a regular set.

You can either keep the resistance moderately high (a cable set at your 8-10 rep maximum) and perform 15 total repetitions, or lower the resistance to about your 15-rep maximum and force out 20 reps. I have found the latter method to provide a better "pump" for the muscles, although the former will allow for a moderate strength increase along with the size increase. Of course, both rep ranges are totally arbitrary – you can use 12 or 18 instead, although I would recommend keeping the total reps per exercise below twenty for any given set. All exercises are performed for one set only. If you're feeling energetic, you might be able to hit two sets per exercise, but if you feel like doing a third you should probably increase the resistance used instead.

Throwing in a set of handstand pushups, or handstands against a wall, or pike pushups between high-rep sets of cable exercises is an excellent idea that I got from old-school bodybuilder, strength enthusiast and prolific writer **Mike Brown** (http://www.mikebrownsolutions.com). This will flush additional blood into the upper body, making you look like you gained twenty pounds of muscle (Mike actually said thirty, but I'm a fan of conservative estimates). While not particularly beneficial to strength-building, achieving a muscular "pump" is considered to be a requirement for building muscular mass, although many fitness authorities have challenged this idea in more recent times. I have found it to work, and therefore believe in the "pump". So do professional bodybuilders and I guess their endorsement is much more valuable than my own.

Muscle Spinning 5x5 System:

Muscle spinning is the term for an old bodybuilding practice, often scoffed at by modern-day strength coaches. The "functional fitness revolution" of the late 1990s and today launched a large number of fitness celebrities who built their household names and dot-com businesses on the bashing of the sub-culture of bodybuilding. These "Experts" ridiculed "Muscle Comic" routines (presented in magazines such as *Flex*, *Ironman* and *Muscle & Fitness*), portrayed professional bodybuilders as self-centered and psychologically dysfunctional, and claimed that their large muscles were "useless" and not capable of performing in the gym or in "real life situations" (an intentionally vague umbrella term for all those everyday occurrences that force modern *Homo Sapiens* to jump, vault, climb, carry, sprint, tumble and throw… you know, the usual "functional" stuff that helps you get through the day, gather some roots and

avoid predators during your 9-to-5 office job). They created the idea that this "dysfunctional" muscle is built up solely through the (ab)use of pharmaceuticals, as if sprinters, swimmers, weight-lifters, American football players, MMA participants and just about every other "functional" athlete hadn't been taking steroids for decades. Do not believe for a second that they did this to save the gullible trainee from wasting his time on unproductive and potentially harmful training and nutrition routines; they saw a market and moved in to seize it, launching a no-holds-barred advertising smear campaign against the competition.

All this flatulent marketing has not led to the total demise of bodybuilding – the tremendous arm of Ronnie Coleman will always attract more naïve newbies than the 13" arms and 22" legs of the "ultimately conditioned" Crossfit paragon – but it has created a massive overload of contradictory information for the serious beginner to physical culture, or even the intermediate trainee who has seen his beginner gains stall and has encountered a rut, or plateau.

The point of all this ranting is, don't throw the baby out with the bath water. Bodybuilding may not be your thing, and I understand you; I'm personally not interested in building coil upon coil of muscle, shaving, and tanning my body and dancing on stage to cheesy music clad in nothing but a yellow leopard-print thong. However, some of the methods used by our oiled-up brothers-in-physical-culture can be worth your while. Muscle spinning is one of these methods.

Back in the days of Muscle Beach, several physique enthusiasts discovered that lifting heavy weights is not the only way to bigger muscles. Maintaining a constant supply of blood to the tissues would inflate them; make them appear larger, more prominent. How was this constant "pump" achieved? By performing countless repetitions with a very light weight. The Muscle Boys would, say, pump up their biceps with a high-rep set of curls with 5-lb. dumbbells, strut around a bit, hit the curls again once their "guns" started losing some volume, and continue doing so all day. Of course, no meaningful amount strength could be obtained training this way, and the size gains were of a most temporary character. One or two days away from the weights and the "pump" would disappear, the muscles returning to their usual unimpressive size. This concept of creating "mirage" muscles that weren't really there ("spinning" them out of thin air) was hence termed "muscle spinning".

Harry B. Paschall, another health and strength enthusiast and writer, later wrote of another, more advanced method of muscle spinning (or "muscle cramping", as he also called it). The trainee would perform multiple repetitions with a moderately light weight, usually in an isolation exercise like the bicep curl. Once he had exhausted the muscle by performing full-range reps, he would continue to do short-stroke contractions in the strongest range only (in a bicep curl, the top couple of inches of the movement) until the muscle was thoroughly fatigued and began to cramp. This exercise principle has survived through the "peak contraction" method, which simply entails squeezing the muscle as hard as possible in the fully contracted position.

The reason the trainee is able to squeeze out those partial contractions in the "peak" range is the fact that this is the most favorable leverage position for great force development. This has already been discussed in a previous chapter. The resistance offered by a dumbbell is uniform; even when the muscle is too fatigued to move the weight through its full range of motion, it will still be capable of moving it through the strongest range of motion. By employing this "muscle spinning" method, the trainee is forcing the muscle to work harder and exploit its maximal force-producing potential until further contractions are impossible and every fiber has been worked to its utmost maximum, leading to greater fluid accumulation in the muscle, better "pump" and more growth.

It is easy to understand how cable training is superior to barbells and dumbbells for "muscle spinning". The further the cable is stretched, the greater the resistance; in the "peak" contraction position the cable resistance is at its maximum, and performing short-stroke strong-range contractions requires much more work than with a dumbbell. On the other hand, cable resistance diminishes as the handles return back to the starting position, providing a welcome break and enabling the partially recovered muscles to pull the set back to full extension.

Thus the **5x5 Muscle Spinning System** came into existence. It has been in use for decades, I have just provided a name and a repetition scheme. The concept goes as follows:

- Select a cable set of moderate to light resistance (the one you use for the 20-rep Pump Method will work well); pick an exercise;
- Stretch the cable to the full extended position;

- Perform five short-stroke "mini-reps" over the last 2-4 inches of the pull (approximately, there is no need for extreme accuracy here); make sure you perform the "mini-reps" smoothly and hold the fully contracted position for a second or two after each "mini-rep";
- Return the cables to starting position. This is one full repetition;
- Repeat for five full repetitions. This number is again arbitrary, but if you can do 7 or more full reps you probably need to increase the resistance.

Perform the abovementioned sequence for a number of exercises. Again, the Big 4 are the best choice, to which I would add the one-handed bicep curl, up-right row (high pull) and a lateral raise variation. **Make sure you maintain good form on these exercises, i.e. no "anyhow" pulls or cheating!** This is a muscle-building method and as such can only profit from strict form. Focus on "feeling" the muscles work during the performance of the **5x5 Muscle Spinning System**. Believe me, the "pump and burn effect" from this type of training is intense, far greater than anything you have ever experienced with weights. Again, one set per exercise is all you need.

Alternatively you could stretch the cables and just perform "mini-reps" to failure, i.e. without returning to the starting position until the end of the set. I prefer the 5x5 method because it allows you to cumulate a lot more "mini-reps" – 25 in total, whereas performing them continuously you might be capable of 8-10. More effort in the range of maximal resistance equals more muscle fiber activation and more growth.

If you are training exclusively with cables, three to five training sessions per week are not beyond your capacities and will not lead to overtraining, even if you are a beginner. For the best overall gains, I would suggest one or two strength-oriented session, one "moderate heavy" session and one or two "pump" sessions, where you lower the resistance and really go for high reps or "muscle spinning". I have outlined several excellent training templates in this chapter, and included three of my own which were not designed by a cable-training authority but which have given me very good results. Pick, choose, experiment, keep and discard, that's all I can say.

Cable Training Methods

So, how many reps? As with weights, bodyweight and any other form of training, this is a tough one to answer and depends primarily on the abilities and physical predisposition of the athlete. Of course, if you already have some training experience below your belt and have attained a decent strength and development level, I have nothing to say – you should already know what works best for you. The only input I can offer is that cable training lends itself to slightly higher repetitions than weights, probably due to resistance distribution and the lack of stabilizing effort in most exercises. So the rep chart for different goals in cable training as compared to weightlifting would be as follows:

Training Goal	Weights (reps)	Cables (reps)
Absolute strength	1-3	1-5
Strength with some hypertrophy	4-6	6-8
Hypertrophy with some strength gains	7-10	9-12
Hypertrophy mostly	11-15	13-20
Muscular endurance	16-20	20 - 25
Waste of time and effort combined with increased chance of injury	20+	25+

The above table is based completely upon personal observation and experience, and your actual numbers may vary (although each training goal has a pretty comfortable rep range to accommodate different needs). For example, some guys just don't see any progress from heavy singles with weights, while others thrive on this sort of program. The last row gives it pretty straight – if you can lift it for more than 20 reps, it's generally not worth the effort. Do bodyweight exercises instead, they integrate all the muscles and condition the entire body when performed for high reps. 20 bicep curls or bench presses are a waste of time; 20 or 30 pushups, squats, etc. are excellent conditioning exercises, especially when combined with adequate breathing. Same goes for cables – if you can stretch it for 25 reps, you better put another strand into the set.

But there are exceptions, you'll say. What about 20-rep squats, or 20-rep deadlift training? Are they not a valuable addition to any weight-lifting/body-building program? Yes, they are. But read the text: to perform the old "Squats & Milk" program, you use a weight that you can lift for TEN repetitions and

squat/deadlift it for TWENTY. One set, some auxiliary work, and that's it. Squatting 20 reps with your 20-rep maximum isn't much of a challenge, to be perfectly honest. Yet this is how most wannabes interpret the time-tested 20-rep program.

Not reading carefully seems to be people's problem in general. I once opined an answer to a forum question; the issue was the quintessential "How do I get real big and strong, fast?" My idea was simple and well-known – use multiple sets of low reps with heavy weights or difficult exercise progressions, keeping in the 5-6 rep range.

Simple, huh? The reply I got flabbergasted me: some time later, that same guy wrote that my advice wasn't working. He said had been performing pushups in the 5-6 rep range and wasn't seeing ANY strength or size gains. The thing was, he was performing NORMAL pushups, which he could probably crank out in sets of 20, for low reps! Obviously the "heavy resistance" bit that should go together with "low reps" somehow got lost in his interpretation. So, to re-iterate the point: LOW reps of HEAVY resistance. Low reps are a function of the heavy resistance – after all, if you can perform ten reps with 80-90% of you one-rep max, something is seriously wrong with your estimates. I have read that individuals who partake in endurance sports like rowing have their one-rep maxes close to their ten-rep maxes, but they are the exception.

Most articles/books I've read on cable training recommend using 8-12 repetitions, even 20 if maximal muscular development is the goal. As stated above, cables lend themselves better to high-rep work than weights, as far less effort is expended in supporting the weight of the implement itself. Therefore a better contraction of the muscle worked is possible, and the tendons and joints are exposed to greater stress the further the cable is stretched. The supporting muscles don't get as fatigued and hence more work is provided to the muscle actually being worked.

The set and rep ranges that have worked best for me were as follows:

- 6-8 sets of 2-3 "heavy" repetitions, performed explosively: I have found it difficult to just do singles with cables, as it's kind of tricky to add just enough resistance to make the jump from a double/triple to a single. This works best with exercises like jerk presses and power pulls. Perform three reps using as much force as possible, "racing" the cable tension in order to complete the rep before the resistance prevents further motion. Think about it as a clean and press

– if you try to clean the weight slowly, you won't be able to lift it to your collarbones. Explosiveness is a necessity.

- 6-8 sets of 2-3 "heavy" repetitions. Cables are good for "grinding" strength work, as you can pause under tension, regroup your effort and try again. Try this with weights and you'll find yourself crushed under a limit-poundage bench press.
- 5 sets of 5 "heavy" repetitions. Use less resistance than on sets in the 1-3 rep range (obviously). A good rule of thumb is using the maximum resistance you can stretch for eight reps (as an all-out effort), then performing five sets of five. Bear in mind you're NOT using the resistance you can stretch for five sets of eight! Keep the resistance high and the reps low.
- 2-4 sets of 6-8 reps. For cables, this is still considered strength-dominant training. This version is a substitute for 5x5 if you're not feeling up to training hard on a given day, or if you're doing a full-body routine (as 5x5 on all exercises in a full-body routine would be exhausting and time-consuming, neither of which is conducive to strength training).
- 3 sets of 8-12 reps. An excellent hypertrophy method – plenty of volume for the muscles to get a tremendous "pump" from. Combine this method with one of the strength-hypertrophy methods above, alternating them every 2-3 weeks, and I can almost guarantee great development.
- 1 or 2 sets at 15-20 reps. This is very useful to bodybuilders trying to "muscle out" added bulk. Perform one or two exercises for each muscle group (in other words, total body training) and pump the muscles to a maximum with one or two sets, using a light resistance. This is also an efficient method to use on your "light" day, if you're following the heavy/medium/light training protocol.

On to the topic of training modalities. I have found cables to work best when combined with the following training methods:

"Slow Cooking": this is analogous to the power rack training method used in weight training. It is a method than enables you to use more resistance over a shortened range of motion. In weightlifting, you can quarter-squat far more weight than you can squat to parallel position. The progressive power rack training method goes as follows: use weights well over your one-rep maximum and perform short-range

partial squats, dipping your knees a few inches for a number of reps, say 4 inches for 15 reps. During your next squat training session, keep the weight the same but increase the range of motion (from 4 to 7 inches) and lower the reps (from 15 to 12-10 reps). Keep applying this method until you work your way down for a single repetition in the full range of motion, and you'll have set a new personal best. Even if you don't manage to do a full-ROM single with the weight you were using for the "slow cooking" method, your one-rep maximum will have increased by a solid amount. The same principle can be applied to the bench press, deadlift and overhead press. This type of training progressively adapts your body to handling heavier loads, and gains in strength are rapid; many experienced powerlifters have broken through agonizing plateaus by using this system.

Similar, or even greater, gains are possible with cable pulls. **Fred Hutchinson**, one of the foremost authorities on cable training, comments on the "slow cooking" method[14]:

"*The absolute best method for increasing cable pulling ability is "slow cooking". How good is it? Using the system simultaneously for the front chest pull anyhow, overhead pulldown, single-arm front pulldown and back press, I doubled my strength on all four exercises in just eleven weeks. This was with just one set of each movement, once a week. Believe me, this is a significant gain with cables* (especially for an experienced cable puller – Note F.), *one that you can see in the mirror and feel in your body*".

How do you decrease the range of motion? First, find your strongest range in each of the lifts you wish to increase. Then attach loops of rope or belt onto the cable handles, or perhaps even an additional handle (rope/belt is cheaper, but also more painful on the hands initially).

As for resistance used, Hutchinson mentions going for "two-and-a-half to three times the usual resistance used". This would not be a smart thing to do with barbell exercises in the power rack, but for short-range cable pulls it carries no added danger of injury. Bear in mind that, unlike with weights, lengthening the pull increases the actual resistance, not just the range of motion (ROM).

The progression? Start with the dramatically increased resistance and pull over the last few inches of the movement. You should be able to work in a relatively high repetition range; if not, decrease the resistance. In each subsequent "slow cooking" workout, keep the resistance the same but shorten the

[14] Hutchinson, Fred: *How to Gain With Cables*, published in MILO magazine, provided courtesy of the Strandpulling Message Board.

handle extensions, thus lengthening the ROM. Naturally, your rep numbers will decrease with each shortening of the extensions.

Eventually you'll hit a sticking point where it's nearly impossible to complete the pull at 250%-300% of your maximal cable resistance. At this point remove some cables (or use "lighter" cables), bringing the resistance down to "only" double the maximum. The reps should be pretty high again. Keep shortening the cable handles until you're doing full-ROM movements with double the original maximal resistance.

As with weights, even if you don't hit double your old max at the end of the program, you'll still have increased your maximum pull by a lot.

Some final pointers given by Hutchinson can be summarized as follows:

- Make sure you work your way down **gradually** – don't make jumps of 2 or 3 inches at a time, rather go for ½ inch increments if needed;
- You can also do an abbreviated "slow cooking" program for a smaller increase of your personal best: just add one cable to your set and extend the handles a couple of inches, then work your way down in a few sessions; you will be pulling the increased resistance in no time;
- Alternatively, you could go for the long-term approach and use triple the original resistance throughout the progression: use smaller length increments (as low as ¼ inch at a time), it will take you longer to get to the full-ROM movement but you'll have *tripled* your original maximum instead of doubling it. Patience is a must.

Rest-Pause Method (also: 50-Rep Total Method): This one is simple. Pick a resistance that limits you to 15 or 25 repetitions, perform a set to failure, rest a few seconds and do a few more reps, rest again and repeat until you complete 50 repetitions. This compresses the workload into a shorter period of time, which according to many strength authorities leads to gains in size and strength.

"Negatives" and Combination Negatives: This method relies on the fact that you can perform the negative portion of an exercise with much more resistance than the positive portion. Therefore you would add enough cables to create a resistance slightly higher than the one you can pull, obtain some assistance in completing the pull (usually done with one-handed exercises, with the non-working hand helping in getting the cables into position), and lower the cables back into the starting position slowly and under

control (without assistance). The one-handed curl is a perfect candidate for this type of training. With two-handed exercises, you would need a training partner to complete the positive portion of the exercise.

Combination negatives are great if you train alone – here the positive part of the exercise is completed using a similar exercise that allows for better leverage, hence more resistance is used. A good example would be the front chest pull / lateral raise combination: perform the positive portion of a front chest pull, then lower the cables to starting position using the front lateral raise. Or do a back press to dislocation (anyhow) to front press negative. Creativity is the key here.

Isometrics: Cables are great for isometric exercises. Use more cables than you can press/pull, then exert maximal force against them. You'll probably be able to budge the cables slightly over the first inch or so, therefore you're easing into the movement (rather than combating solid resistance from t e very start, as in yielding isometrics with weights). An additional benefit is that cable iso's are safer - there is no danger of getting squashed by a heavy weight in case you fail to support it. Work them in the usual isometric training patterns - max efforts for 3-7 second exertions, or 20-60 seconds at lower resistances (60-70% of your one-rep maximum) for hypertrophy.

Ballistic: Cables are also superior to weights for ballistic, or exercises performed at high speed. A set of speed squats with a barbell will take its toll on your joints as the inert weight stresses the lower back and knees (rapid rebounding at the bottom, quick lockout at the top) no matter how light the total poundage is. High-rep ballistic squats are much easier on the joints, which is especially important for lifters who wish to perform these fundamental exercises but suffer from lower back or knee pain. Other cable exercises also lend themselves well to this type of training. A couple of sets of high-velocity high repetitions are excellent for conditioning. Low-rep explosive sets at high resistances are great for speed and power. Dennis Weis, *The Yukon Hercules*, had the following to say in an article from (don't laugh) www.bodybuilding.com covering training with expanders (cables)[15]:

"...Expander cable training builds tendon and ligament strength - flushes the muscle area - gives added muscle tone and gives sharpness to the muscle which cannot be obtained by weights alone... During this

[15] Weis, Dennis: *Expander Cable Training*, courtesy of bodybuilding.com

30 minutes to 1 hour program (four days per week), use SPEED with smooth movement in each of your exercises.... Strive for shorter rest periods between each set of exercise. In this way, you will be able to add more and more sets in the allowed 30 to 60 minute program..."

Isometronic: I first saw this term used in Charles Poliquin's *The Poliquin Principles*, but the training method has been around for much longer. This excellent method combines the best of both worlds - an isotonic movement combined with an isometric effort. Cables are far better suited for this than weights, as the resistance increases as you progress through the movement. Basically you load a cable set to a resistance slightly higher than your maximum, then stretch the cable until further movement becomes impossible, then hold an isometric contraction for 3-5 seconds. Return to starting position slowly and repeat. The reason why cables work so well is that you are usually able to stretch the cable a certain length to begin with as the resistance in the beginning position is lower, hence movement is possible. As the resistance increases you'll find it impossible to stretch the cable further and here a maximal contraction is possible. Worked for sets of 4-7 reps this is a great strength and size building tool.

Peak Contraction: Let me state this clearly - I am, and never will be, an advocate of slow-motion training. This type of training is unnatural. Real life situations demand real-life explosiveness and a powerful contraction throughout the range of motion, and by doing slow-motion training you're essentially coaching your body to forego its natural tendency toward lifting heavy weights in an explosive manner. However, adding a brief 2-3 second squeeze at the top of the motion will greatly increase the tension in the muscle and contribute to better shape and size gains. Yes, all the hardcore "functional training" fanatics out there (who seem to focus less on functional training and more on flaming bodybuilders by means of custom-made internet forums with every passing day) will say that it's "muscle pumping" and that it belongs in the training arsenal of some spandex-wearing, fake-tanning "boobybuilder". We can ignore that group – they jump on and off the bandwagon whenever a new training "philosophy" rears its head, and anyway it's much more impressive to be big and weak than small and weak. End of story.

"21" Training: This was a favorite of bodybuilding guru Vince Gironda (if you stick around strength training long enough, you'll learn to hate two words: "guru" and "functional"). He recommended it with

weight training, but it applies quite well to cable training too. Everybody's probably heard of it – gym rats often use it to "pump their guns" (bringing their bi's over the 14-inch mark... for about half a minute, until the pump is gone). The system involves seven partial reps over the first half of the range of motion of an exercise, followed by seven reps over the second half of the ROM, finishing off with seven full-ROM reps. Naturally, the 21 repetitions are performed back-to-back, i.e. they all combine into one set. This type of training is used to "belly-out" the muscle, in other words, make it fuller. It is the ultimate form of "pump training" and not really conducive to strength gains, but pretty effective as a muscle-shaping exercise.

If you're not squeamish about using "boobybuilder" techniques, the 5x5 Muscle Spinning System goes a long way towards combining peak contraction and "21" training – consult the previous chapter for details. It works.

Basically, if you think it's a good idea and it works for you – neglect everything written above and do your own thing. You set the goals and hold the ultimate responsibility. Remember, if you place 100% effort into an exercise it **will** produce results, regardless whether you're lifting a barbell, stretching a cable or simply contracting the muscle in an isometric fashion.

It has been said before, but one should always focus on proper form and muscular activation throughout the performance of a repetition. The mind-to-muscle connection is of utmost importance in exercising – this is the element of training that takes you to the next level, or that's responsible for stagnating progress in size and strength. Mechanic performance of exercises and movements is acceptable for beginners, but progressing to heavy weights and / or resistance is impossible without focusing the mind on the task at hand.

Nutrition 101

Is there anything left to be said on nutrition? All this information is floating around us. Eat high carbs and low fat. Eat high fat and no carbs. Eat high protein, but without carbs and/or fat. Don't mix carbs and fats in the same meal. Eat six small meals a day. Eat one huge meal a day. Eat at night. Don't eat after six pm. Eat nothing but meat on one day, nothing but starches on another. What should a guy / gal do, with all this conflicting information?

The most frustrating thing is, all these diets work! People drop dozens of pounds following each and every one of these feeding regimens. Certain body-types find certain diets more suitable, but there's something out there for everyone. Still, for every person who follows a diet successfully there are two or three who cross over the obesity line. Even worse, many dieters who lose pounds following their diet of choice soon get weary of it and drop off, regaining lost pounds rapidly and with "accrued interest". It is therefore not surprising that the diet industry is one of the most profitable industries around – you sell your high-priced products to overweight people, they lose weight and buy them like crazy for a while, then get tired of the monotonous feeding patterns and foodstuffs and stop buying them (which is not a problem, as for every portly customer that you lose you find one or two new ones), then they get fat again, only to return to your diet as a "tried and tested" solution. It's an ever-expanding market, with unlimited potential for growth (both in terms of financial opportunities and body-mass).

Why do diets fail? There is a plethora of reasons, but here are the ones I consider key:

1. The only reason a diet works initially is because it limits your food options. If you're not allowed to eat certain foods, you'll tend to eat less; e.g. if the Atkins diet calls for a steak meal, but all you've got is cereal and you have neither the time nor the inclination to go buy a steak, you'll probably miss that meal. In addition to this, if a steak is required and you've been eating steak for the past 6 days, you won't really feel like eating steak again. End result – you give it a miss, or you eat less than you normally would. From here onwards, it is all mathematical: less calories in plus same calories out translates into calorie deficit, which in turn equals weight loss. Once your

food options are not as limited, you'll usually find a new (heightened) appetite for certain things... what happens after that is pretty straightforward.

2. Totally eliminating certain foods or beverages results in cravings. Then you "break down" and end up face-planted in a gallon of ice-cream. I've even read about people craving things that they don't normally eat at all – the psychological effect of "forbidden fruit" is lethal to one's diet.
3. Many people also tend to take up exercise during their dieting periods. Misguided as their routines might be, the health effects of a regular exercise regimen on sedentary folks are enormous. This also ties in with the 'less calories in – **more** calories out' equation, equaling weight loss. The end of a diet is usually the end of the exercising. Ah, back to where we started.

So are weight-reduction diets bad? No. Some people, the really obese part of the population, do need radical procedures to lose weight. I firmly believe that any type of exercise, except for perhaps light walking, could kill truly obese people. This is the only instance where I would advise dieting without exercise; however, once their bodyweight reaches normal limits, exercise should be introduced, very light at first, building up to higher intensities. This is not impossible, but it takes determination.

What, then, would be an appropriate eating regimen for a dedicated cable puller or weight-lifter? In my opinion, the answer is simple. An active person should follow these general guidelines:

- Increased protein intake – preferably through food (milk, red meat, chicken, fish, cheese, nuts). You can consume 2-3 servings of meat / chicken per day without adverse effects, contrary to popular superstition. Fish is great – eat all you can.
- However, if one does not have the time to prepare high-protein meals, or the funds to purchase quality protein foods (busy folks in the former, or college students in the latter instance come to mind), a good protein supplement is required. I recommend whey protein isolates ("mass gainers" are full of insane junk). Try to get a decent brand – a lousy protein supplement produces gas, not muscle.
- Simple carb intake should be limited to the morning and / or the post-workout meal (the first thing you eat after a workout). Even then, simple carbs should come from natural sources like

fruit and honey, not sugar, candy, cakes and other refined sugar foodstuffs. Refined sugar is a poison that causes a number of health issues. Try to avoid it altogether.

- Eating 5 – 7 servings of fruit and vegetables a day is very beneficial. However, those of us who live in the real world might have a problem with this sort of feeding frequency. Three servings is a minimum, with a serving being equal to one cup, or one medium-sized fruit (or a large small fruit, such as a kiwi, or a half of a large fruit, such as a grapefruit), or 20 grapes, cherries and similar fruits. Aim for several servings in one sitting – eating two medium apples at once as a snack would see you well on the way towards the recommended 7 servings.
- Water is important – aim to drink around 2 liters per day (slightly over half a gallon), and make sure you don't gulp it all down at once. Try to keep the body hydrated. Getting enough liquid and proper nutrition will increase your strength by 10-15% - many trainees would gladly pay big bucks for a supplement or miracle solution that produces the same effect.
- Reduce starchy carb intake. Breads, pasta, rice and potatoes are something most people in the developed world could stand to reduce in their diets. That said, whole-wheat versions are OK (but practice moderation).
- Avoid these modern-day plagues: refined sugar and carbonated drinks. CO_2 is toxic – this is something that your body releases through metabolic processes, a waste product. People in their right mind wouldn't drink their own urine, would they? Refined sugar causes B-vitamin depletion, destroys the teeth both from the inside and the outside, weakens the bones and is probably the leading cause of obesity. Plus I probably don't need to delve into the perils of diabetes.
- Alcohol is a nerve toxin and should be avoided. Some moderate consumption is beneficial. Limit yourself to a couple of glasses of wine, or a couple of beers a day. Sometimes this will be impossible, but strive to eliminate alcohol as much as you can. Beer also has the disadvantage of being high in simple carbs and a carbonated drink. Choose other options whenever possible.
- Understand that you can't maintain a tight diet 100% of the time – this is unhealthy both from a physical and mental point of view. Sometimes you have to give in to cravings, but make certain this is not done too often. If you can stay on target 80% of the time, you'll do OK.

- Here are some foods you can eliminate without much pain: candy and soda. This is pure poison without any nutritional value. The good side is, even if you consume these on a regular basis, 2-4 days after eliminating them from your diet your soda / candy cravings cease.

That would be about it as far as nutrition is concerned. Mix and match what you know for optimal results. Bear in mind that an active person can live off a less-than-optimal diet without getting fat, so training gives you some leeway in this direction.

For trainees looking to gain weight, I would stress two nutritional points:

- Eat lots of calorie dense food, like red meat and nuts. Add a liter of two of milk per day **on top** of the other food you consume.
- Eat right before going to bed, making sure carbs are limited to a minimum in this meal. Good choices: tuna, meat, cheese, peanut butter. You can add a small protein shake too, but whey is digested quickly, so make sure you include a slow-releasing protein too (cheese works very well).

As for supplements, the following is advised to all:

1. Protein powder,
2. Multi-vitamin and multi-mineral tablet,
3. Additional vitamin supplementation: vitamins C and B,
4. Fish oil capsules,
5. Glucosamine supplement (protects the joints).

With supplements, less is more. Don't take vitamins on a daily basis, introduce mini recovery cycles for the body. When you feel like a cold is coming on, increase vitamin C supplementation, it is truly a "wonder drug".

Stick to a reasonable diet and train hard, and results must come. The old-time strongmen gained mountains of muscle following a natural diet. More importantly, most of them were paragons of good health, a quality lost in today's body-builders. Remember, physical culture goes beyond an impressive pair of shoulders and arms.

Closing Notes

What you have just read is a compilation of articles and personal thoughts on cable training. This is by no means a comprehensive instructional, but I feel it covers most bases. The difficulty in finding information on cable training is the fact that the competitive version of the sport has all but disappeared off the face of the Earth (I haven't been able to find a single reference to a modern-day strand-pulling competition), and years of abuse of the public image of cables through various types of "yoga stretch bands" and similar gimmicks has hardly helped the chest expander establish itself as a strength and conditioning tool.

Fortunately, several strength specialists have correctly identified the enormous strength and size-building potential of cables, leading to a revival of interest in this type of training. The cable is a training tool suited for everyone, from the middle-aged exercise novice to the elite strength athlete.

Instead of turning this into a repeat of the introductory chapter which explains why cables are great, I'll close off here. Allow me to reference some sources:

Title	Author	Source
All About Strandpulling	Syd Devis	Strandpulling Message Board
How to Gain With Cables	Fred Hutchinson	Strandpulling Message Board
A Primer on Cable Training	Brad Reid	Fred Crivello's website
The Function and Use of Chest Expanders	Jack Reid	Strandpulling Message Board
On The Pull	Dave Turton	SFUK Articles & Reviews
Expander Cable Training	Dennis B. Weis	bodybuilding.com
Jettison Technique	Dennis B. Weis	criticalbench.com
Muscle Molding	Harry Paschall	www.sandowplus.co.uk
Big Arms Book	Bob Hoffman / York Barbell	*Tight Tan Slacks of Dezso Ban* blog
Big Chest Book	Bob Hoffman / York Barbell	*Tight Tan Slacks of Dezso Ban* blog
York Advanced Methods of Weight Training	Bob Hoffman / York Barbell	www.sandowplus.co.uk
The Danks System of Physical Culture	Alfred Danks	www.sandowplus.co.uk
The Chest Expander for Abounding Health & Building Better Bodies	Alfred Danks	www.sandowplus.co.uk
The Power-Plus Cable Course	Joe Bonomo	www.sandowplus.co.uk

As you've seen, a lot of the information in this instructional has been borrowed from other sources. Feel free to follow up on the names and sources I have mentioned above – should you find more information on cable training, please share it with the rest of the training community.

Please note that I do not endorse internet piracy. All the information presented in this instructional is either my own, or available free of charge through different websites. Do not reproduce portions of books for public viewing unless you obtain the permission of the author. **Having said this**, I will stress that I have **no intention whatsoever** to remove information from old strength training courses which are in print today by persons other than their original authors. This is why I have freely included portions of the Syd Devis book and some other strength publications from the turn of the century which are being re-printed and sold today. I do not recognize the individuals reproducing those books as the authors and legitimate copyright holders of said books – if someone wishes to pay for the books in question, they are free to do so, but I have just as much right to publish this information as the re-printing companies do. Just to make it clear.

On the other hand, make sure you distribute this instructional to as many individuals as possible. Training information is difficult to come by, especially information on cable training. Finding the few articles I quoted above took me several months of searching. While every other "strength expert" has a thing or five to say about weight training and bodyweight training, cable training info is difficult to come by.

So take the information from this instructional, dissect it, find the useful gems and toss the junk aside and train. If you find one useful exercise among the eighty outlined above, your time has not been wasted. Plus the price can't really be beaten, can it?

Again, should you chance across new and exciting information on cable training that hasn't been included here, please share. I can be contacted through the Bodyweightculture forum (www.bodyweightculture.com), screen name Fatman.

Good luck in your training!

Fatman

Bonus Report – Bob Hoffman on Cable Training

Here is an excerpt from Bob Hoffman's excellent book on the York systems of arm development, *Big Arms Book*. Love him or hate him, Hoffman was probably the most influential man in the history of bodybuilding and weight-lifting, and the York Courses and books he published under his name are an excellent source of training information even today, almost eight decades after they were written.

I have endeavored to preserve peculiarities of expression characteristic of that day and age – to the best of my knowledge, this piece of text is presented in its original format.

CHAPTER FOURTEEN

CABLES IN ARM DEVELOPMENT

Cables are used universally; more in England and European countries, I believe, than in America, for over there it has long been the practice to hold cable pulling championships. There have been some men with magnificently developed arms who made a specialty of cable stretching and the winning of these contests. While cables are best known as a means of developing the shoulders, upper arms and chest they provide a great deal of resistance for the Triceps in particular. The stirrups, which are part of a York Home Gym, make possible the practice of most of the dumbbell exercises which have brought such good results – the front curl, back curl, upright rowing motion and of course the various forms of pressing.

Years ago there was a strong man from the Argentine, Belvidere Del Monte by name, who had developed a pair of wonderful arms, principally through the use of expanders. Not more than a half dozen men in the world, it is believed, could stretch his expanders. He concentrated so much on arm development and cable pulling strength, neglecting his lower body, that he had only a 21½ inch thigh – not much larger than a really strong man's arm. He had only a mediocre ability at handling weights because the largest and most powerful muscles of the body – the legs and lower back – had been neglected.

Seguinel, a famous European expander specialist, has a simply wonderful Triceps and his entire upper body development is exceptional. He, like Del Monte, does not have the strength to handle heavy weights. Joseph Vanderznaden, known as the "strong Belgian," was perhaps the strongest expander puller of his day. Even the

famous French authority, Prof. Desbonnet, considered Vanderznaden's arm to rank among the best. There is a good reason for this, however, for aside from his proficiency at cable pulling he also trained almost daily with weights. He not only had huge arms, but really strong ones too, through all this training, and was capable of a great many strength feats besides cable pulling.

Fred Rollon was considered by a great many European authorities to be the most magnificently developed man who existed in their time. He had a most unusual muscular development and muscular separation – was, in fact, a human anatomical chart. He concentrated for years upon cable training and became the recognized world's champion of the cable training art. Cables accounted for the truly remarkable upper body development he possessed. His cable pulling did not give him the ability to lift heavy weights and he was so chagrined at times through being bested by smaller men, with not nearly his impressive development, that he took up the regular practice of weight training and became a successful lifter.

There are certain exercises which can be done with cables that are not possible or as convenient with weights. Although this book is intended to be a treatise on arm development, we promised at the beginning to mention allied groups of muscles which aid the arm in doing its intended work. The *Latissimus Dorsi* is one of these groups and this muscle can best be developed with cables. As explained in the chapter on anatomy, its purpose is to pull the arms down from overhead. There is no way that this can be done with weights, for weights are heavy and must be pushed or jerked overhead and held there. They come down fast enough of themselves through the force of gravity without the possibility of pulling them down. Therefore the exercise in which the arms are held at full length overhead, being held straight throughout and then pulled down to shoulder height, not only strengthens and develops the *Latissimus* better than any other exercise, but also assists in the development of the upper arm muscles which attach to the *Trapezius*, the tendons too, and of course accounts for considerable development of the upper arm.

Another exercise which is possible with cables and can not be practiced with dumbbells, one that develops the arms and shoulders form a somewhat different angle, is the pull to straight arms at shoulder height with cables. The arms are extended to the front, at shoulder height, and then holding them straight are pulled until they are fully extended at the sides. This is primarily a good Deltoid developer, but the arms must withstand

considerable of the effort of stretching the cable and of course as in the previous exercise receive considerable development.

The archer's movement is one of the popular cable exercises not possible with dumbbells. One arm is extended to the side at full length and shoulder height. The other with the knuckles front is pulled away, just like pulling the string of a bow except that it is extended to full length in the opposite direction. The hands should be reversed in practicing this exercise. Pressing both arms simultaneously with the hands held high in front of the body brings the arms and shoulders into action in a different manner than does any weight exercise. The back press is one of the very best for developing the *Triceps*, *Deltoids*, and the side or bent pressing ability. Although a similar movement can be practiced with dumbbells, an exercise that many consider the best Triceps developer known to physical training, it's wise to practice it at times with cables. It's this movement more than any other which has developed the really remarkable arms of some star cable pullers. For in this style greater resistance can be overcome, more strands stretched than in any other way.

If you were to travel through Europe you could not find a department of sporting goods store without cables. Nor could you find any sort of gymnasium where a group of men train without their cables. When we went to Germany to the Olympics in 1936, we saw cables everywhere. Made of steel and some of the most tremendous rubber strands anyone could imagine, it would take a real strong man to progressively move from one to another in the various exercises. The majority of the great German lifters, the men who hold the championships, European and world's records, incorporate considerable of cable training with their weight lifting practice. When the German team came here to meet our strong men in an international team match to determine the world's championship weight lifting team, each brought a set of cables with them. These were used in addition to the weight lifting training while here, but served as the sole training medium while on the sea and traveling from place to place where weights were not always available.

The best physiques in the world have the indelible stamp of cable training upon them. The multitude of movements possible with a modern cable set build strength and muscle from every angle, more muscles are brought into play and a superior shapeliness and greater strength result. Cables are invaluable for the man who is unable to use weights at home, owing perhaps to a limited space, the fact that he lives in a furnished room or apartment where others would be bothered by even the slight sound of weight training. Or perhaps he is a

man who can make one or two visits weekly to a Y.M.C.A. or gymnasium where weights are available. This is not enough to more than keep a man in condition. To make progress there should not be less than three training periods weekly, preferably four, and for the man who does not perform physical labor of any sort, five training periods will be best if he is really ambitious.

Cables will keep the muscles in condition on the intervening days when it is not possible to visit the gymnasium and handle heavy weights. Cables will "tone the muscles," as Rudy Ismayr, the German weight lifting captain, Olympic champion of 1932, world champion other years, had to say in explanation of the use of cables by the members of his team as well as himself. Cable training prepares the muscles for the harder work to come where heavy weights are employed. All men who strive for great strength, weight lifting ability, a perfect physique with really big arms, should use cables.

Cables serve best in developing the muscles which are so conspicuous in the male physique. They impart certain shapeliness to the physique which can not be acquired in any other way. They build magnificent shoulders, a fine development of the upper back and powerful, admiration-creating arms.

At lifting shows, weight lifting clinics, conventions of physical directors and other gatherings where men interested in the development of the human body will gather, I am frequently asked if our strong men use cables. Did John Grimek use cables? The answer is yes, and it would be yes if you asked me about many other forms of training. For like all men who obtain the ultimate in strength and development, Grimek has spent considerable time with cables. And he also has done most everything else in the line of lifting, barbell and dumbbell work, balancing and all sorts of manly physical activities and games. For I do not know of one really outstanding physique which is not the result of the "thousand exercises." It takes all around training to bring out the strength and the greatest possibilities of the muscles in shapeliness. While I am on the subject I perhaps had better explain what the "thousand exercises" means. Many have written to inquire. It means only that the men have performed a thousand different bodybuilding exercises – all they can think of or learn about.

Some of the finest built men in the world have devoted a great deal of their training time to cable training. In looking over photos of an old catalogue showing men who had gained strength and development through cables, we see the photo of Kenneth Terrill, one of the finest built men ever developed in this country. Gregory Paradise, one of the most powerful of the smaller men, a man who chins repeatedly with one finger.

And Charles Atlas of "train you by mail without apparatus" fame. Yes, he was a star cable pupil; his photo appears in the catalogue, and cables helped him to the physique which has made his life so much easier and more profitable. It would be interesting not just to compile a list of the strength and development stars of the day who have used cables, but of the few who have not used them – hardly a man who has not used cables at some stage of his career.

While cables bring best results for the upper arm in all sorts of pressing and stretching movements, there are a number of good exercises for the front of the arm. One and two hand curling can be practiced with the stirrups and one hand curling by thrusting one foot through the handle of the cable set. Lateral and forward raise, upright rowing motion, spreading the arms to the side while leaning, back hand curl and many other movements greatly assist in the building and strengthening of the arm.

GOOD EXERCISES WITH CABLES

1. Front press.
2. Back press.
3. Pressing overhead with one arm, holding the other end of the cable with extended arm back of body.
4. One hand curl, front and back, left.
5. Right hand curl, front and back.
6. Two hands curl, palms up.
7. Two hands curl, knuckles up.
8. Rowing motion, upright position with stirrups.
9. Spreading the arms to side while leaning.
10. Rowing motion while cables are held by the feet. This movement is usually performed by stretching the center of the cables over the bottoms of the feet. There is as much resistance as you could wish for in this movement and the arms will have plenty of work to do.
11. Raise to side. A very good Deltoid developer but benefits the arm too, owing to its attachment with the shoulder muscles.
12. Archer's movement. Practiced with first the right and then the left arm extended.

13. Press across back, starting with one hand straight and pressing out against the other. Reverse, starting first with the left arm straight, the right pressing, then the right straight, the left pressing.
14. Hold arms at shoulders, cable back of neck, forearms in gooseneck position. Stretch cable by straightening the forearms until the arm is fully extended at sides.
15. A somewhat similar movement except that the entire arm is involved. Instead of just straightening the arms by moving the forearm, start with the upper arms against the body and press them out, holding the hands and wrists in the gooseneck position.
16. Pull arms down from overhead, stretching cables at shoulder height. The best Latissimus exercise known, but one which aids the development of the arm owing to the attachments of the Latissimus to the upper arm.
17. Spread arms from front at shoulder height, keeping them straight throughout.
18. Raise the arms in front of body from a beginning extended down with cables across thigh to the point where they are extended overhead. Keep the arms straight throughout.
19. A somewhat similar movement behind back. Knuckles up, raise the arms, stretching the cables as far as your muscles will permit.
20. Starting with the arms extended to the front, backs of hands toward each other, extend the arms to the sides at shoulder height. Keep arms straight throughout.

ENDORSEMENT

Although Fatman Publications is a non-profitable organization devoted to the promotion of strength, health and physical culture for all, this Guide to Cable Training is not free of advertisements. Sometimes you chance across a piece of training equipment so ingenious and useful that you just have to tell the whole world about it. This particular product, at least its commercially available version, was not in existence at the time the first edition of Guide was compiled, otherwise there would have been more mention of it. Why? Because it's amazing, to put it in plain English. It is the piece of equipment that covers any and every possible training need of the chest expander enthusiast, regardless of strength or experience level. Absolutely adjustable, capable of providing virtually unlimited elastic resistance, high-quality and durable, yet affordable – sounds too good to be true, doesn't it? Yet this ingenious innovation,

THE HOOK

delivers everything it promises. And more. Much more.

The Hook is the astounding brain-child of the **Mighty Shenandoah**, the larger half of the creative duo behind ***Shen & Grunt's Workshop***, an Internet site which has become the first and only household name in homemade exercise equipment. I have long admired the engineering acumen of these two gentlemen, who have been providing construction information and blueprints of their gadgets at absolutely no cost (and still do, at http://www.angelfire.com/ny5/shenandoah/Grunt/grunt.html) for many years now, at least by Internet standards. However, I always had one beef with their stuff – you actually had to get off your lazy ass and MAKE it, you know, with your own hands (and possibly feet) which has always presented a major issue for us technically disinclined / challenged folks. Commercializing **the Hook** (and a pair of equally marvelous grip training devices) is a step toward rectifying this horrible injustice perpetuated upon us who would rather pay money than take our chances with a hammer, nail, or (Heavens forbid) a circular saw.

Its revolutionary cable loading / unloading system makes **the Hook** by far the most advanced chest expander / cable exerciser ever to hit the market. Let us look at some of the advantages of **the Hook** which no other cable training system can equal:

There are **3 Key Factors** that make **THE HOOK** the most advanced system of Building Muscle available:

1. Speed - It's not the amount of time spent on workouts that matters, it's the quality of workouts that matters. The Hook enables you to set your resistance levels in a split second, allowing more time spent on exercises.

2. Progressive Resistance - The Resistance Bands provide progressive resistance with each and every rep of each and every exercise, challenging muscles to the max!

3. Versatility - The Hook isn't merely a pair of handles connected by resistance bands as are other such exercisers, The Hook is unique - essentially a pair of dumbbells enabling unlimited resistance and providing a vast array of exercises not possible with other systems.

Sierra Exercise Equipment® currently offers the following **Hook**-related items:

Handles: Made of heavy 1 ½ webbing stitched with heavy canvas thread, wrapped in thick, genuine leather, each handle is capable of withstanding up to 225 lbs. of pressure. The hardened-steel hooks encased in ¾-inch vinyl protect the latex resistance bands from wear&tear. For the hidden *Fashionista* in all of us, handles are available in black or tan leather.

Over Door - Under Door - Side Door Attachment: This superior piece of equipment comes with the same guarantee as the handles – it is tested up to 225 lbs. of pressure. The material is again of the highest quality (hardened-steel hook permanently secured in hardened casting resin and encased with vinyl).

The door attachment enables you to perform exercises from any multitude of angles, and has been christened "the Cadillac of door attachments". It is fully compatible with other exercise systems (Lifeline, ExerGenie, etc.).

Resistance Bands: These bands, made of high-quality latex surgical tubing, are offered in three resistance levels:

Heavy ……. 25 lbs.
Medium ……. 16 lbs.
Light …… 5 lbs.

The latex tubing stretches and snaps back into its original shape with minimal losses in elasticity. The creator of **THE HOOK** has been using the original bands he made for the first version of the device five years ago. One can easily see that the unique properties of **THE HOOK** allow for **virtually unlimited** resistance combinations, making it the device of choice for the performance of exercises in which enormous cable resistance is required, most notably deadlifts and hack / regular squats.

So please stop wasting your and Shen's time and **BUY THE HOOK**!

http://www.sierraexercise.com