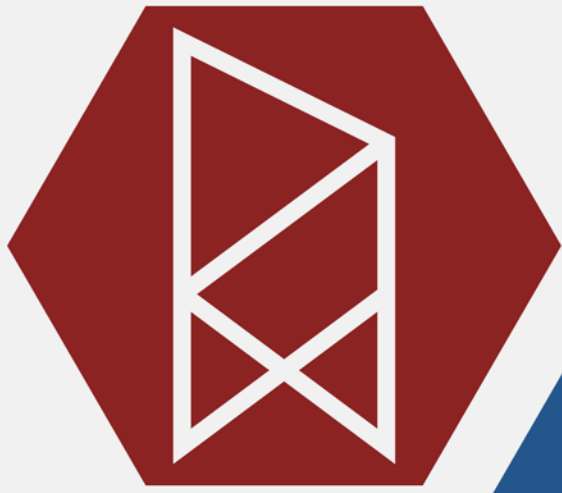# THE JOURNAL OF ARRAY DESIGN

VOL 2

FOREWORD

Welcome to the second volume of the Journal of Array Design!

Its been a tremendous year for us here at Stormforge Productions and we got a lot done and published, including two Ruined Man campaign books, and of course a whole heap of runic arrays!

Just like in the first volume, you'll find all the arrays that we've designed over the past year alphabetised and categorised as either Offensive, Defensive or Utilitarian. And this time we added in all the Incantations! So if you are more of a spell-slinging mage than the patient runescribe, we got you covered as well. If you are interested in learning how to create runic arrays and incantations like the ones you will find in here, just go to **DriveThruRPG** and search for *The Sigil System*. It's free to download and will teach you all you need to know.

If you want to show the world your skill at array design, you can have your own arrays published in our next volume! Simply head on over to www.stormforgeproductions.com and submit your design in the same format as what you will find in this Journal and the next volume you receive will have your name and array presented for all the world to see.

Until then, enjoy this Journal and the arrays it contain and may they serve you well in your adventures through worlds fantastical and mysterious. And should you require any help with any of the arrays, simply ask and we will be glad to help.

Until the next journal!

Yours aye,
Izak Tait

ASPECT OF WOUDAS

NOTATION

Apply the effect of a Created, Sustained Fire that excludes Heat onto Humans within an area 100 times greater than the area of the array.

DESCRIPTION

The *Aspect of Woudas* array is an instructional array far more than it is a practically useful one. After all, how many times will you need to encase people in fire that don't give off heat? However, what it can do it show folks how you can use complex arrays in order to achieve a goal you may not have thought possible. It also serves a secondary purpose in that it can be used as a template for other complex arrays you might have in mind.

The key thing to remember about complex arrays is that the secondary array (the one inside the main array) takes the place of any normal rune in a locus and is treated as such. This means that you can use other runes to affect or even modify the secondary array. Here we used a *Contain* and *Gargantuan* rune to specify the size over which the effect must happen, but you could easily have used size runes to modify (rather than affect) the secondary array to increase or decrease the amount of fire you wanted, or time runes to speed up or slow down the flames. You could even have been much ambitious and use a *Transmute* rune to transmute a material(s) into the entire effect.

The bottom line is that if you can do it with a normal rune in a normal locus, you can do it with a secondary array.

The other useful thing to remember is that it is the effect of a secondary array that is affecting the centrum (or other locus), not the runes inside. In other words, work out what the secondary array does and then apply that to what it is affecting. In this case, the secondary array creates an continuous fire that produces no heat. So if you apply that to humans, it means that all humans within the area specified by the array are on fire but the flames produce no heat. This is important, because if it were the runes and not the
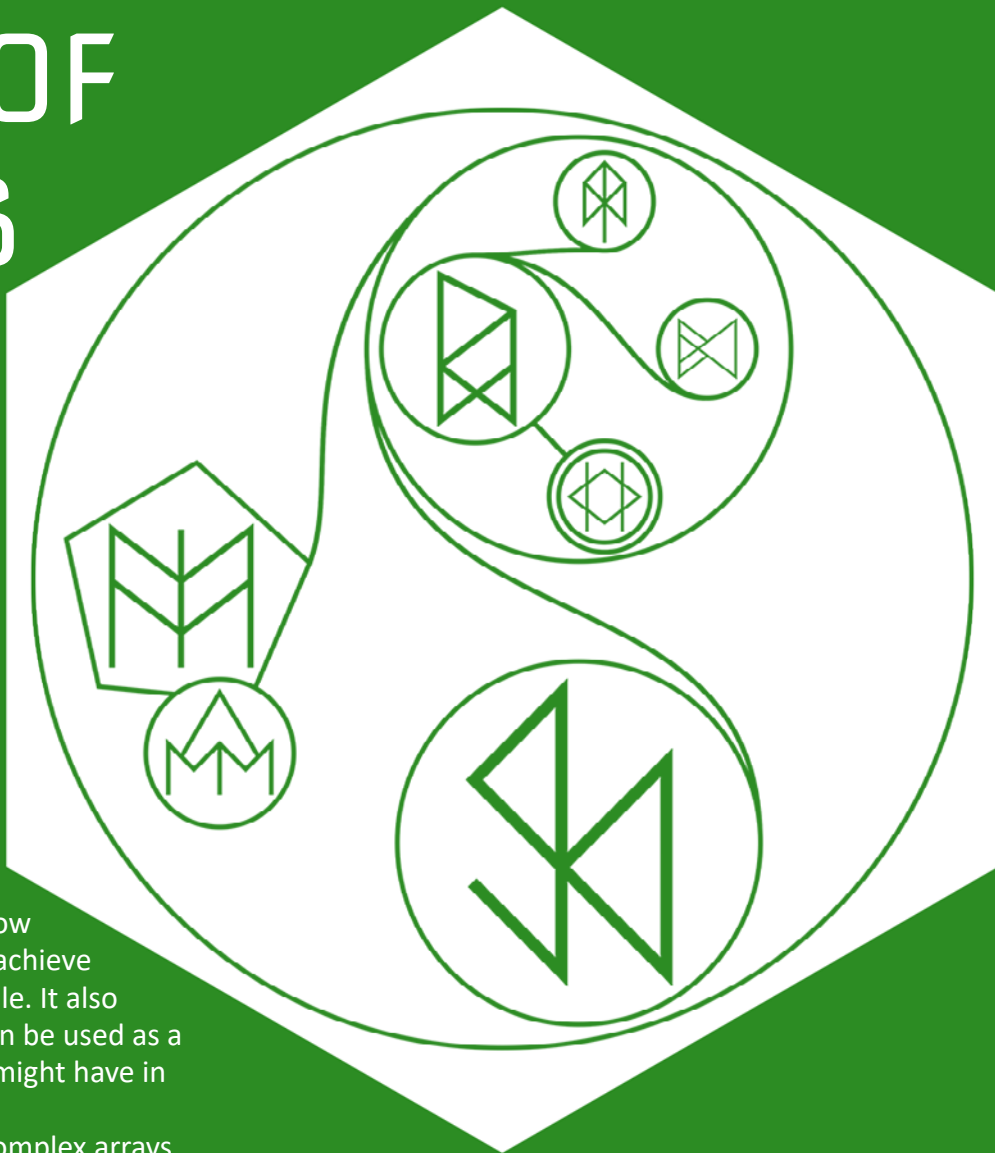
effect that affected the humans in the array's area then the *Create, Sustain* and *Exclude Heat* would all have been applied to humans which would have meant this array created frozen human popsicles.

Lastly for this little master-class, you can swap out the secondary array here for any array you want and have the array do all sorts of things. Arrays are, by their very nature, quite flexible, so the only limit is your imagination.

BLACK DEATH

NOTATION

Sustain the Creation of a disk of Carbon in the shape of a ring 100 times as large as the array, and 10 times as wide, and as thick as 0.001 times the array's circumference. Push that Carbon at a speed of 1 m/s and Rotate it anticlockwise at a speed of 32 m/s and apply the effect of the Destruction of Humans to the Carbon.

DESCRIPTION

It's not a pretty array, nor an easily digestible notation, but what it lacks in elegance and simplicity, it more than makes up for it in power, spectacle and raw, unadulterated evil.

The *Black Death* is and does exactly what it name implies. When activated, this array creates a flat disk in a ring around the array that is immediately broken up in the tiniest fragments and sent flying around the array at the gale-force speed of 115 kilometres per hour and slowly pushed outwards at the gentle pace of 1 meter per second. If any of the smallest bit of this smoke tornado touches a human, it vaporises it. Even a whiff of this smoke can cut straight through the stoutest man. If that isn't bad enough, the creation of this smoke is sustained, meaning it will continue for as long as there is energy in the array. With this single array, a villain can create a tornado large enough to rip roofs from houses, break windows, tip cars and kill an entire town.

As to the mechanics of how a flat doughnut of carbon could become this monstrosity? That relies on two inbuilt mechanisms of the runes and arrays. Firstly is what the *Carbon* rune actually is. When it is used in an array to simply push and pull and contain it, the rune affects all types of carbon, from coal to graphite to diamonds. However, when created, the rune can only create one sort of carbon: amorphous carbon, or simple coal.

Now for a bit of calculation. Imagine a dastardly and depraved man creates the array with a diameter of around 30 cm, this means that the created carbon ring has a diameter of 30 meters and is 3 meters wide but only 3 mm thick. That is one fragile disk doughnut. As soon as it is created it is pulled violently to one side and pushed outward, ripping it apart. But that may not be enough to create smoke, but would probably only create a tornado of coal pieces.

What helps the smoke process along is the fact that the creation of the carbon is sustained, meaning every millisecond a new ring is formed, again and again, over and over. As physics tells us, no two objects can occupy the same space at the same time but that is exactly what this array is trying to do. What is the result? A ring that is constantly exploding and destroying itself as millions of rings try and occupy the same space. This is what turns it to smoke and is also the reason for the *Push* rune in order to keep the smoke from harming whomever is standing over the array activating it in the continual explosions that are occurring.

BLACK DEATH

NOTATION

Sustain the Creation of a disk of Carbon in the shape of a ring 100 times as large as the array, and 10 times as wide, and as thick as 0.001 times the array's circumference. Push that Carbon at a speed of 1 m/s and Rotate it anticlockwise at a speed of 32 m/s and apply the effect of the Destruction of Humans to the Carbon. Cast from Waist.

INCANTATION

Behg Ob Kôltos Ant Rônde Ant Mürklen Cob Dün Ydruch Non Ob Drahaii Ant Omkirdi Non Schniv Fayf Cob Non Fîtî Meing Dün Ob Môk Ant Omkirdi Cob Kîtî Non Môk Dün Anhal Non Ob Hohd Ant Mürgrot Non Skehrem Cob Ent Fin Gorbehl

DESCRIPTION

This is the only incantation in this journal that is a carbon (pun completely intended) copy of another array, and there are two reasons for it.

Firstly, because this array was in fact first designed as an incantation, but more importantly to show how it is possible to turn (nearly) any array into an incantation with very little alteration.

As to how to calculate the size of the initial tornado? Well, keeping in mind the above array's description, the average human has a waist diameter of around 30 cm, this means that the created carbon ring has a diameter of 30 meters and is 3 meters wide but only 3 mm thick.

With this being an incantation, it gives some benefits you would not often see from a traditional array. The most convenient one is that, since this incantation is cast from your waist, the whole effect will automatically move around with you. You will always stay in the eye of the tornado and you can drive it wherever you want to go.

BLUE ROSE'S KISS

Create Air of a volume 10 times that of the array's area if Water is present and Cool Air at a rate of 16 degrees Celsius per second.
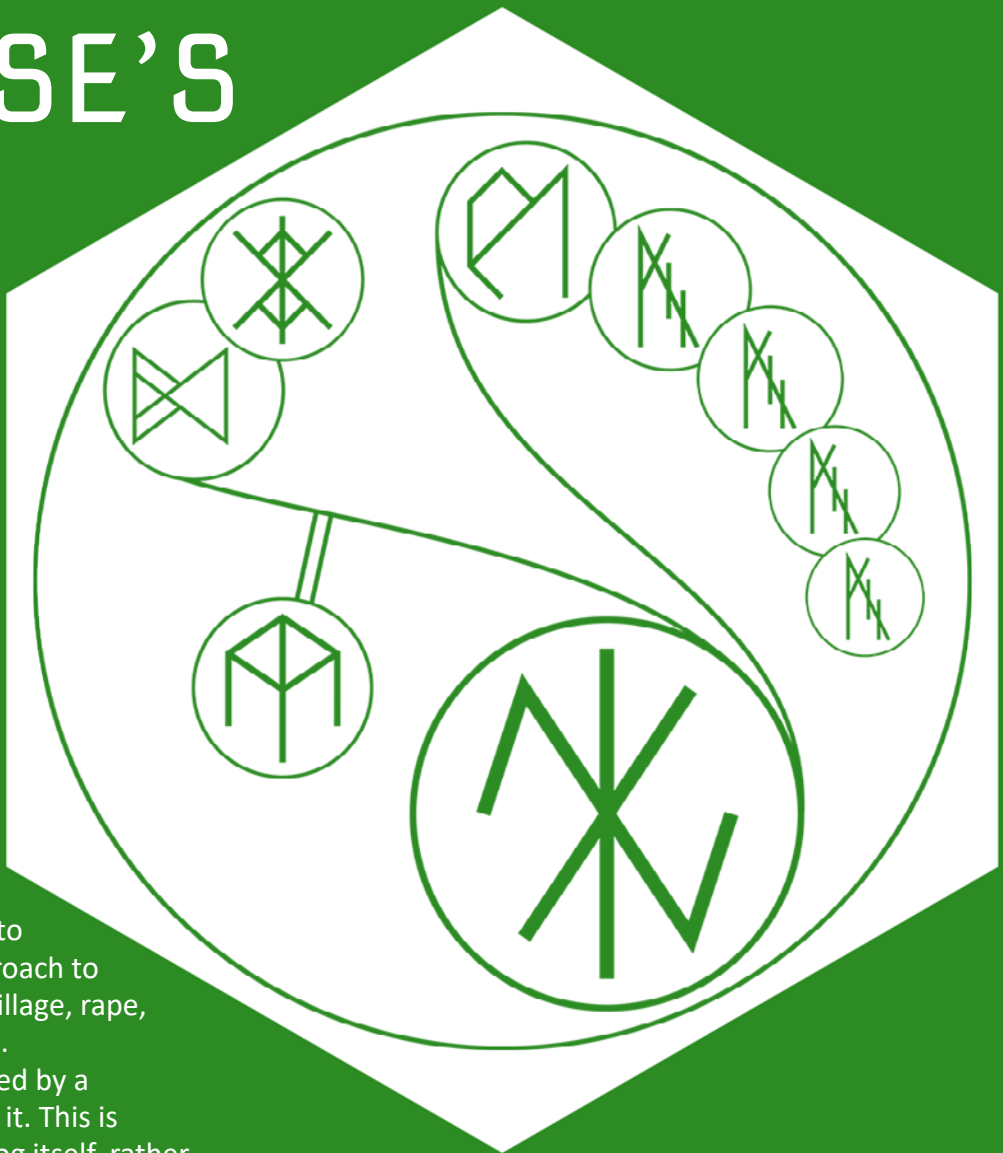
DESCRIPTION

It is a beautiful and charming name for an array often used to commit the greatest of atrocities. The *Blue Rose's Kiss* was designed to create fog for pirate vessels to hide in, but more often than not it's been used to create a smokescreen to hide their approach to far flung villages and ports in order to pillage, rape, burn, steal and destroy what they could.

For an array this barbaric, and created by a barbarian, it has a touch of ingenuity to it. This is because the array does not create the fog itself, rather it creates the conditions necessary to naturally create fog. Fog, much like clouds, spawn when water in the air condenses. The higher the humidity and the cooler the air, the greater the chance of fog and the more there would be. That is why this array cools air so rapidly and only produces air when water is present. This last bit is important as the *Blue Rose's Kiss* is meant to be inscribed on cannonballs and shot into the distance. Thus, when the cannonball is facing towards the water, it will create air, kicking up as much water as possible in order to increase the humidity.

For air to condense, it needs something to cling to. Sea salt is fantastic for this job, and as the array kicks up a great amount of air, it also kicks up sea salt into the air to start the condensation process. This means that wherever these cannonballs are shot, fog and violence will soon follow.

The array is named after the ancient Alfresian pagan goddess of the oceans: The Blue Rose. She was a cruel mistress who expected obedience and sacrifice, and it was said she would come upon the morning fogs to claim what was hers were she not pleased with the humans' offerings.

Just as she came once upon a time to reap her harvest, so the pirates come to reap theirs. The only way to know if it is a natural fog or a kiss from the Blue Rose is the whispers in the fogs, the susurration caused by the cannonballs writhing around in the water kicking up air and salt. However, this could simply be the Blue Rose herself, whispering the names of the men she has come to claim for her watery depths.

BÜR'S GRACE

NOTATION

Create a Large Containment field that excludes Humans if Humans are present within an area 0.1 times the array's size.

DESCRIPTION

Named after the legendary figure who gave humanity the runes and arrays, this array is the last mercy that many criminals will be given in this life. That is because this array is the preferred method of execution in most of the world of the Runed Age.

It is called merciful because it results in an instantaneous death and thus by all accounts painless. It takes an especially heinous crime or a particularly sadistic ruler to inflict any other method of execution. The traditional method of execution for traitors to the state is beheading followed by the head being kept alive with the arrays for a minimum of an hour. Similarly, the mad king Markus VI ordered that all executions be performed by burning the convicted alive.

The reason why this array is so merciful in comparison is because how it is set up. If you exclude anything within a containment field, that object is instantly disintegrated into nothingness. However, once that containment field has been set up, the object it is excluding cannot enter it. This is how defensive arrays work. So the trick is the have the target inside the array before setting up the containment field.

That is where the If-Then statement comes in. Only once a human has reached the centre of the array (a tenth of the array's size across) does the array activate. The containment field of the *Bür's Grace* array is also large enough that, once in the centre, it will take care of any human of any size and shape.

It may be a morbid array, but the in harsh world of the Runed Age, you take any small mercies that you can.

CIRCLE OF LIFE

NOTATION

Create a Containment Field that excludes Dead Humans if any are present.
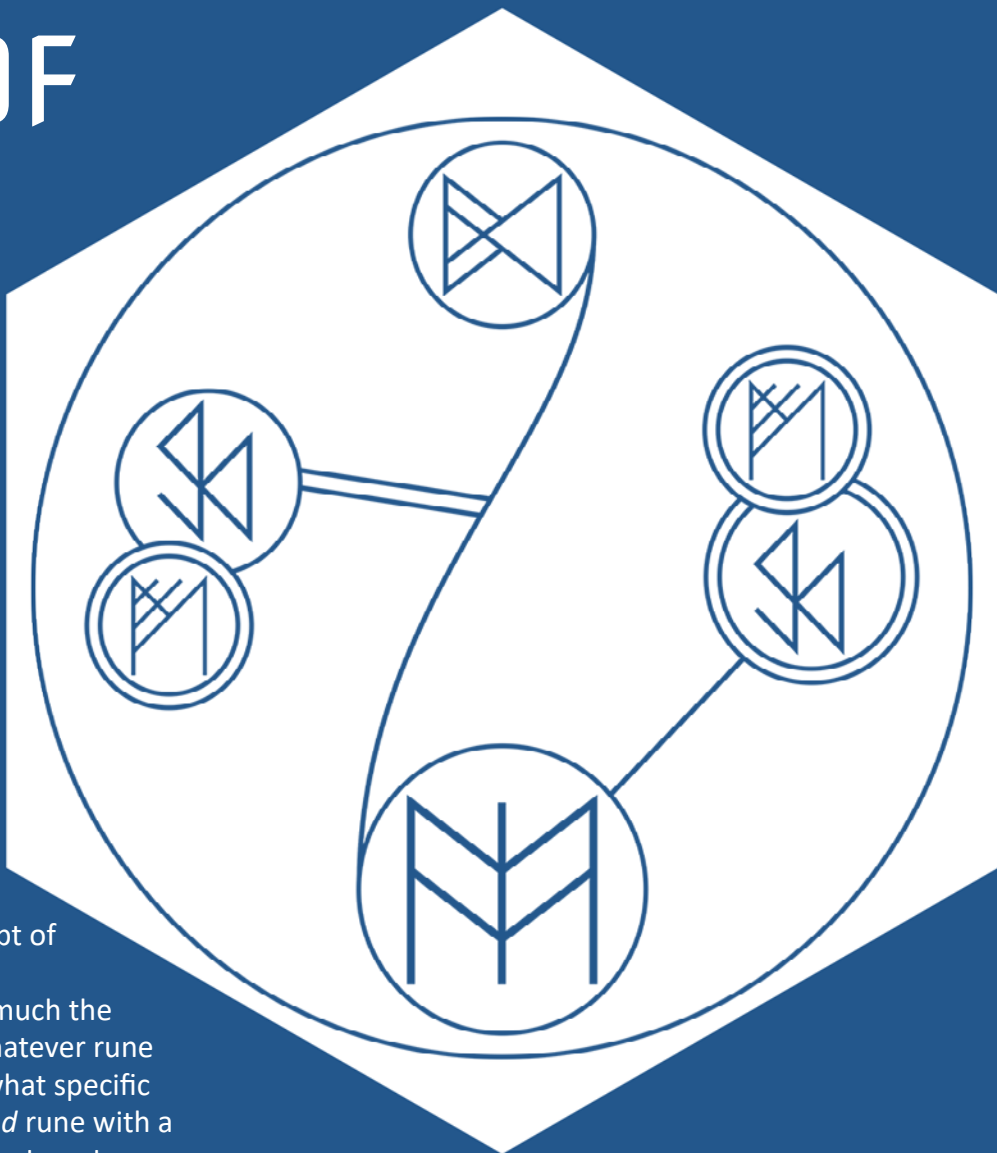
DESCRIPTION

The most basic of anti-zombie arrays you can make, and also the one that will save your life more times than you will be able to count. The *Circle of Life* destroys dead (and undead) humans when they enter the array's field of effect. It's simple, it's clean, but it brings a new element to the realm of runic array design and that is the concept of the exclusionary modification.

Exclusionary modification works in much the same way as a normal modification. Whatever rune you put as the modifier tells the array what specific sort of material to target. Modify a *Blood* rune with a *Human* rune and you tell the array not to target any sort of blood, but to target human blood specifically; modify the *Human* rune with a *Life* rune and the array will specifically target living humans only. It all sounds straightforward and very familiar, but what if you don't want to target living humans or all humans, but specifically dead (or undead) humans?

Well there are two ways to do this. First is to make an array that targets all humans, then use that array as a secondary array inside a larger one and exclude living humans from the effect of that secondary array. It does the same thing as the *Circle of Life*, but you can easily skip all those steps and simply use the *Life* rune as an exclusionary modification to tell the array to target humans that are not living.

As you can see in the array above, to make an exclusionary modification is quite simply. All you do is add an extra ring around the rune to show it is being excluded just like you would do with an "If-Not-Then" statement or an "Exclude" statement that the *Circle of Life* also has.

And there you go, now you have far more flexibility in your runic array designs. Remember you can also use an exclusionary modifications when it comes to speed and size runes to be able to better hone the accuracy of your arrays.

COURTEOUS UMBRELLA

NOTATION

Create a Containment Field in the shape of a Half-Sphere 100 times larger than the array that excludes Water if Water occupies the same space.

DESCRIPTION

A common theme among the runic arrays, especially so in the *Runed Age*'s grand city of Middelburg, is that is is not the array itself which is remarkable, nor the effects it creates. Rather it is the use of the array that makes it remarkable; the way that it is blended with technology in order to create something greater than the sum of its parts.
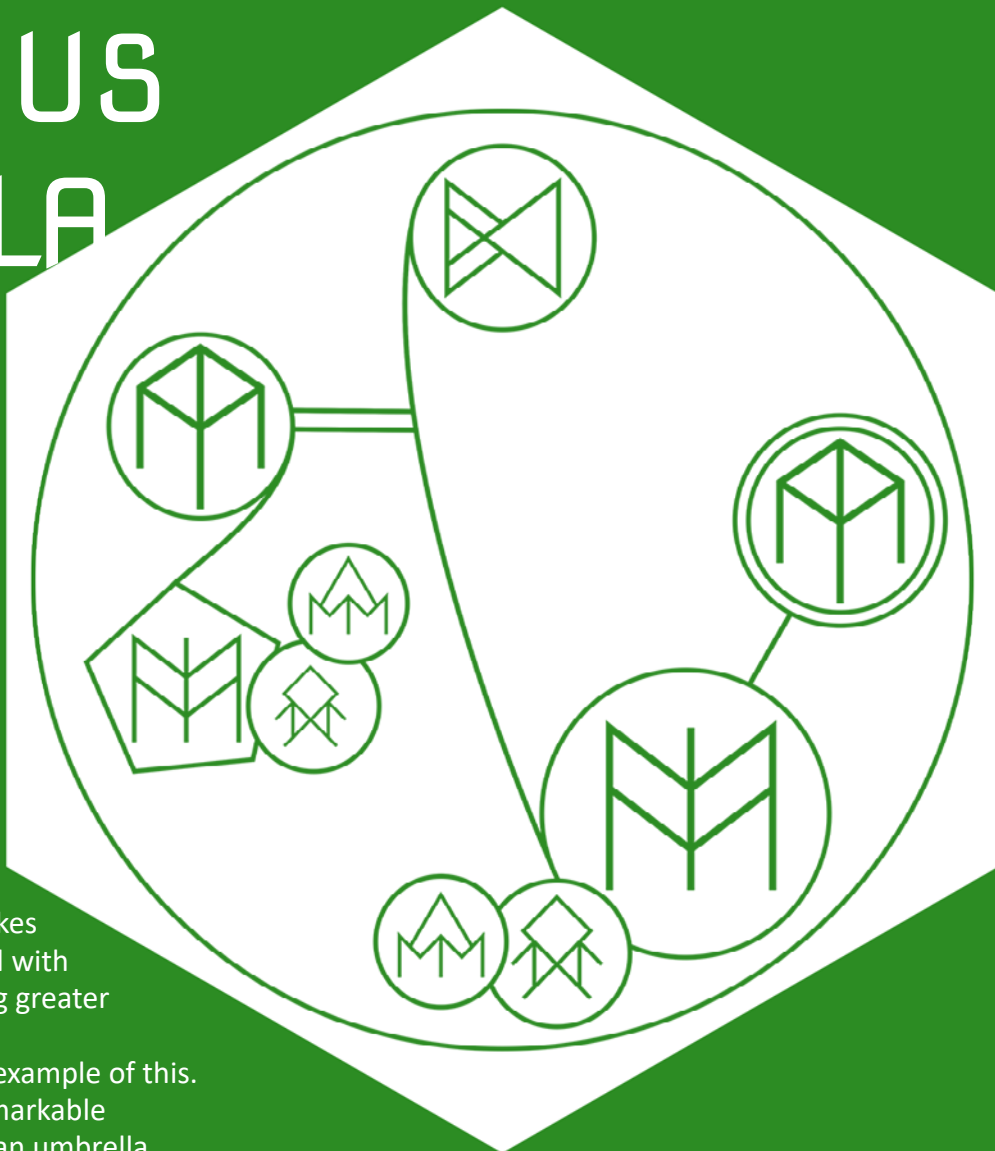
The *Courteous Umbrella* is a stellar example of this.

At first glance, it is an entirely unremarkable and mundane array that simply acts as an umbrella normally would, by preventing you getting wet in the rain. At best, from just looking at this array, it is a very convenient array as the If-Then statement means it activates automatically should it detect water.

But when you think about, really think about it, that's when it becomes remarkable.

Because it is a simple drawing, it isn't actually an umbrella, it replaces an umbrella. You don't need to lug around an umbrella wherever you go in the hopes of one day needing it only to not carry it with you when it does start raining. You can inscribe this array on the top or bottom of a walking stick and simply hold it up when it starts to rain. You can put this small array on your hat and never again have to think about it or even worry about rain. If you aren't a hat person, then simply put the array on the shoulders of your shirts and jackets and it will still work the same. Wanting to open up a small cafe outside? Just put this array in the centre of any table and your customers would never get wet while enjoying a romantic rainy day coffee.

And then of course there is a reason this is called the "courteous" umbrella. In a crowded city like Middelburg, on the rare times the city's government allows it to rain, can you imagine how even more crowded it would become when a million people start opening umbrellas in those narrow streets? You won't be able to even move for lack of trying. But with this array, that same crowd will move as if it was a sunny day and with all the overlapping containment fields from all the arrays, the streets would barely even get wet.

Remember that arrays are not just for combat, they can be useful in even the most mundane of situations.

DARK FOLLY

Contain Human and apply the effect of Inverted Time.
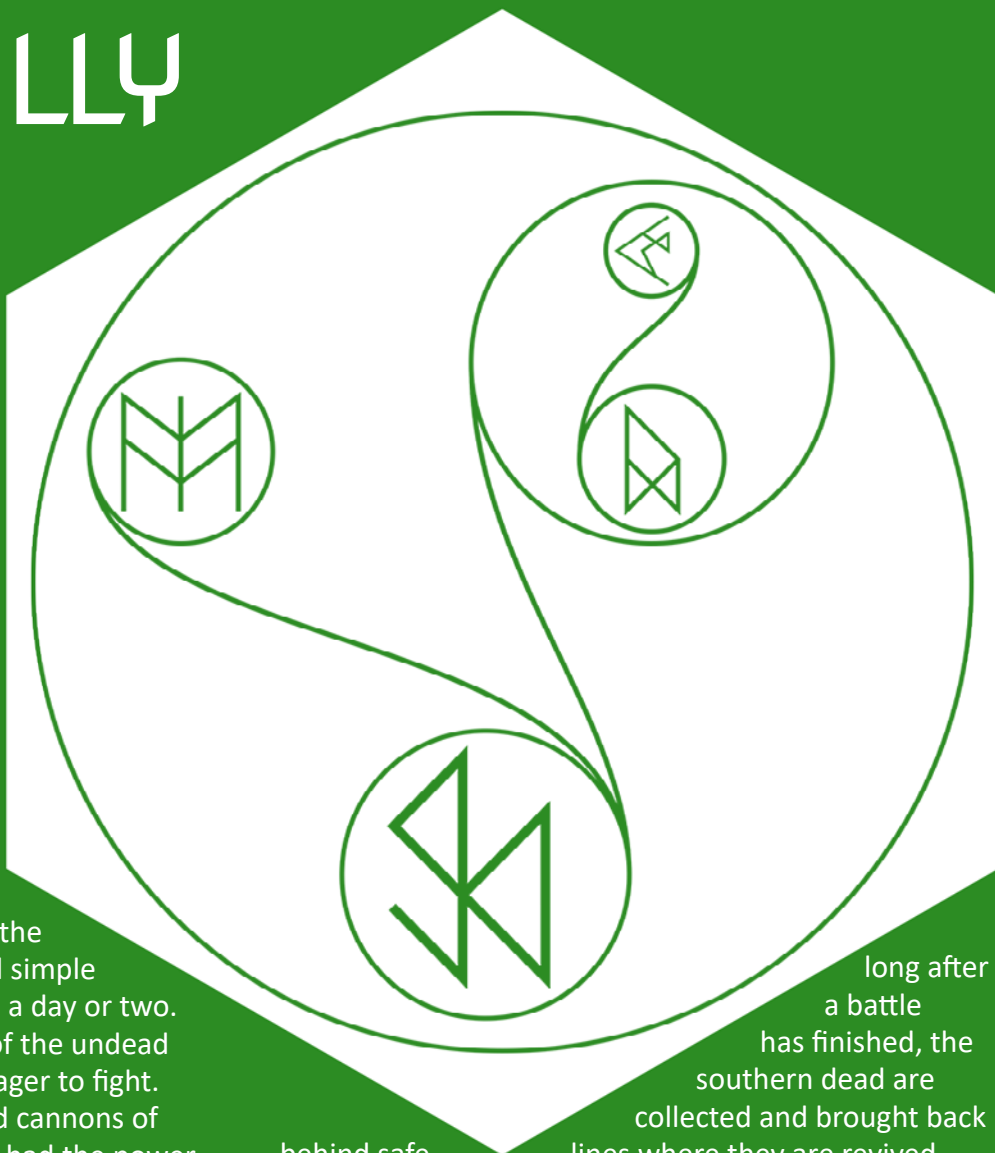
DESCRIPTION

Conquest is no easy thing. The Westerners and Bythikans trying to colonise the southern continent have discovered that, while the Caels and Tolians have long since known it when dealing with the Uttosians. In a world where every man has access to the power of the gods, conquest and colonisation is a struggle at the best of days. When the Westerners discovered the southern continent they thought to find simple savages that they could do away with in a day or two. What they found instead were legions of the undead armed and armoured with arrays and eager to fight. They may not have had the muskets and cannons of the Westerners and Bythikans, but they had the power of death itself.

The Dark Folly is one of the few arrays brought back to the continent exactly as the dark southerners designed it. It was also the first array that gave the Jytohans the clue as to what the *Invert* rune actually did. The *Invert* rune is powerful, but by affecting time it becomes the most powerful of all runes, because inverting time does exactly what it sounds like: it makes time run backwards.

Playing around with time is about as expensive as it gets when it comes to powering the arrays, and that is why it is so seldom done, but the southerners have found a way around this issue. They only invert time on and inside the human body targeted by this array. It is still costs more energy than turning a man to gold, but far less than inverting time entirely within the containment field.

The effect of this is that the human inside moves backwards and any wounds start to knit themselves as time flows backwards. Even musket and pistol rounds extract themselves as they are caught up inside this time distortion.

While you can use this to heal cuts and scrapes, the dark southerners use this to bring the dead back to life. That is why the containment field exist, because long after a battle has finished, the southern dead are collected and brought back behind safe lines where they are revived. Since time will flow backwards with this array, the dead would naturally move back to the battlefield before any wound closes, but with the containment field they are kept in place.

The result is that it is common practice for the southern kingdoms and empires to have legions they call "the Immortals", consisting of men brought back to life more times than you've had hot meals. These men are killed time and time again, only to be brought back to life in a different place with no memory of the event. Their lives are spent cheaply, but with great effect against the Neoist and Bythikan conquests.

When the Jytohan forces discovered the use of this array, they were as appalled and disgusted as they were ready to use it. Militarily it is the most effective weapon one can have, but spiritually? Neoism, Prodigalism and Progenitorism all teach that the soul leaves the body upon death… so does it come back when the dead are revived? It is question for scholars and philosophers, but what can be said is that the few who have thus far been brought back (both soldiers on battlefields and footmen in Middelburg) were changed by the event. They are different now, more distant, less vibrant with cold to their friends and family.

DRAGON'S BREATH

Contain the Creation of Fire to the boundary of the array and Push the Fire at a speed of 8 m/s. Cast from the Mouth.

INCANTATION

Behg Vür Dün Ob Ydruch Ant Schniv Durii Cob Non Môk Dün Hohd Ent Fin Bek
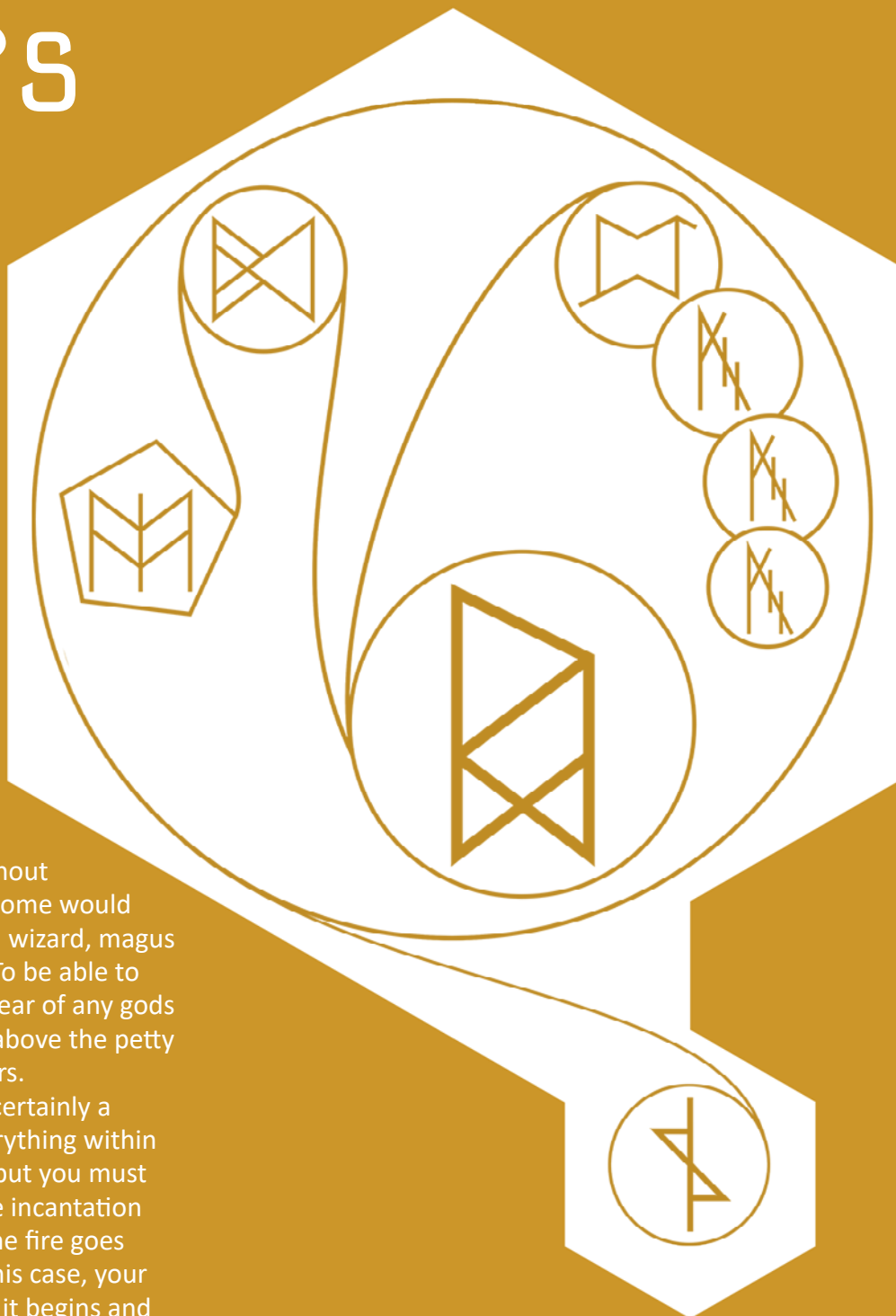
DESCRIPTION

    A classical spell straight from the repertoires of every great mage throughout all the various fictional worlds. In fact, some would say you can't call yourself a great mage, wizard, magus or warlock without knowing this spell. To be able to breathe fire like a dragon can puts the fear of any gods into your enemies and puts you a step above the petty hedge wizards and adventuring sorcerers.

    The *Dragon's Breath* incantation is certainly a powerful spell, capable of covering everything within eight metres of you in fire in a second, but you must take great caution with such power. The incantation places no limitation on exactly where the fire goes other than away from the array (or in this case, your mouth); the only containment is where it begins and that is only within the array. The reason for this is because the incantation is already a lengthy one and you don't want to give a whole monologue before breathing fire.

    So while you can be confident your mouth won't catch on fire, everything after that is fair game. The *Push* rune only moves whatever it targets away from the array, whether that is up or down or left or right is based entirely on chance and luck and where precisely that tiny bit of fire is in relation to the exact centre of the array. This means that any part of you (like your arms) happens to be in front of you while you say the last word of the incantation, it could very well catch fire as well.

    Much like a dragon's breath, the *Dragon's Breath* is as explosive and dangerous as it is powerful. Use it wisely.

EFFECTIVE SOLUTION

Invert the Creation, in an area 10 times the size of the array, of Humans if a Human is present.
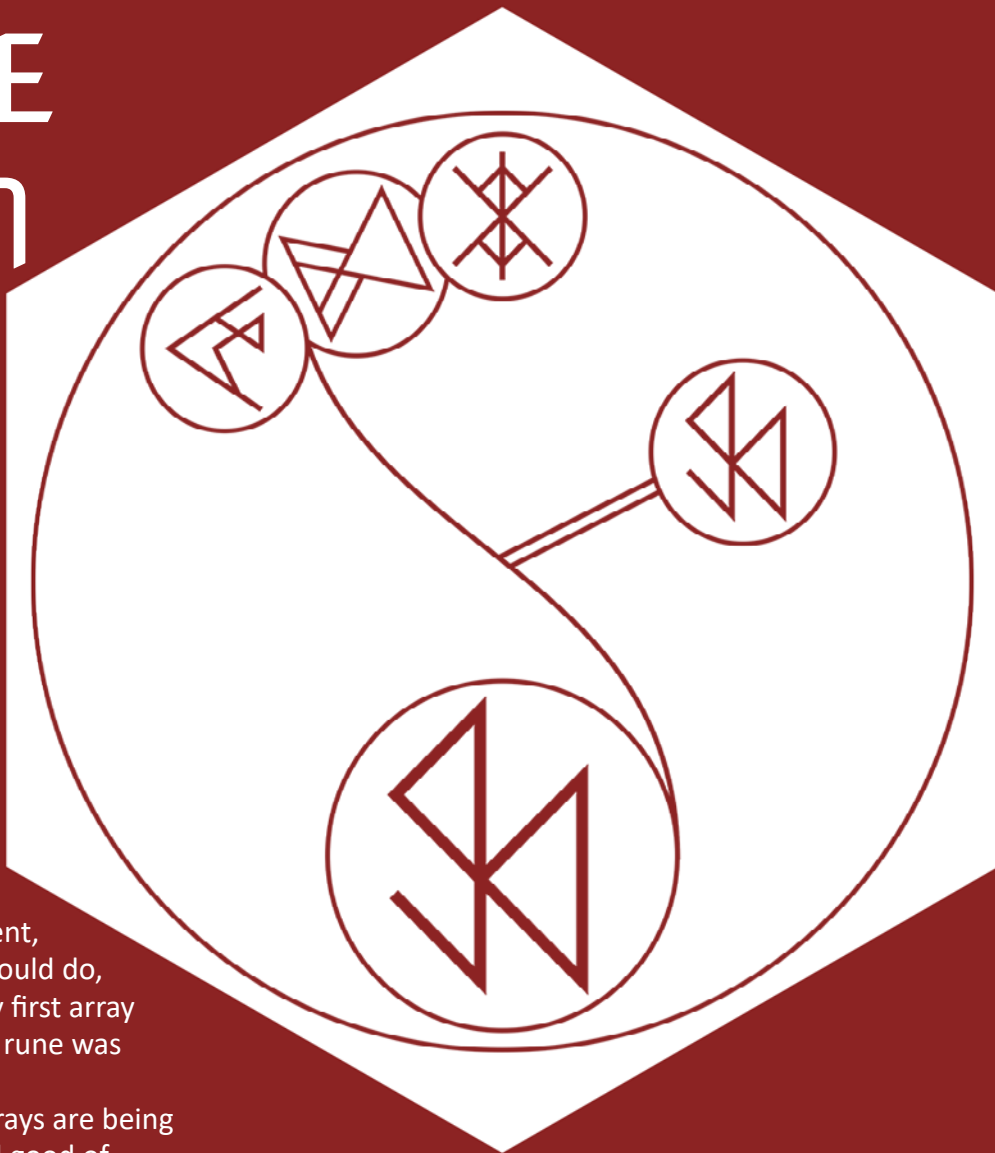
DESCRIPTION

The opposite of create is destroy and this is all the *Effective Solution* does. When a human is present, it destroys humans. Simple, clean and an effective solution. It says a lot about humanity that when the Alfresians first learnt of this new and strange rune discovered among the warring kingdoms of the dark, Southern Continent, they did not think of all the good they could do, they instead created this array. The very first array created on Alfresian soil with the *Invert* rune was created to kill.

Of course, slowly, but surely new arrays are being created to better the greater communal good of humanity, but in the month since the rune's arrival in Middelburg there has already been thousands of new offensive arrays intended to hurt, maim and kill. As with the *Rotate* rune, the Middelburg authorities are looking to regulate it, but how can you regulate a concept, an idea? Between the *Rotate* and *Invert* runes, the city seems ready to tear itself apart all over again when it hasn't even finished rebuilding.

How the people of the Southern Continent every survived with such a rune in their midst, the Alfresians will never know, but it has had the greatest impact on their differing cultures than anything else. All the various nations of Jytoh, including Alfresia, had struggled long and hard to find common ground with the people of this dark continent, but nothing had ever worked. War was always the result, and now that the Alfresians have their hand on the *Invert* rune, they know why.

The concept of inversion is in everything the dark southerners say and do. A hello can be a goodbye, a peace treaty a declaration of war, an insult can be a compliment and so much more. That a single rune can have had so much impact on a whole continent is staggering to think of, but with the power of this rune it isn't surprising.

EIGHT FOLD PATH

NOTATION

Transmute Air into Fire that excludes Heat if a Human are not present and Contain, Sustain, Rotate and Slow the Fire.

DESCRIPTION

The array's true name is not actually the *Eightfold Path*, but the Alfresians could not easily pronounce the Uttosian name for it and so simply called it for the Uttosian spiritual philosophy in which it is used. In one of the many Uttosian faiths, the Eightfold Path is the way of reaching spiritual and mental enlightenment. The last of the eight paths to enlightenment is to master the art of meditation, and for this the Uttosian monks use this array.

For all practical uses and purposes, this array has none. While it falls under the "Utility" heading, it is more of an ornamental array. The fire it creates is as cold as ice and thus no good to anyone, the array requires far more energy than it rightly should by having to spend it on slowing, rotating and sustaining the fire. It may look pretty, but that's about it. To any practical minded and serious runic scribe, this array would frustrate him to no end... which is precisely it's point.

The Uttosian monks inscribe this array onto small wooden disks that can fit in the palm of your hand. Wood, of course, is an insulator and not a conductor and that's why you find a footman's arrays inscribed onto copper or silver. There is a reason for this, however, and that is because this array uses body heat as it's main source of energy and using copper and silver would allow it to gain too much energy too quickly.

To master the art of meditation, a monk simply places the wooden disk inscribed with the *Eightfold Path* onto one palm and then closes his other hand over it. And so he sits, hands clasped together until his body heat has leached enough energy into the disk to sustain a fire. If he doesn't meditate long enough, the fire he creates will last only a few seconds and the
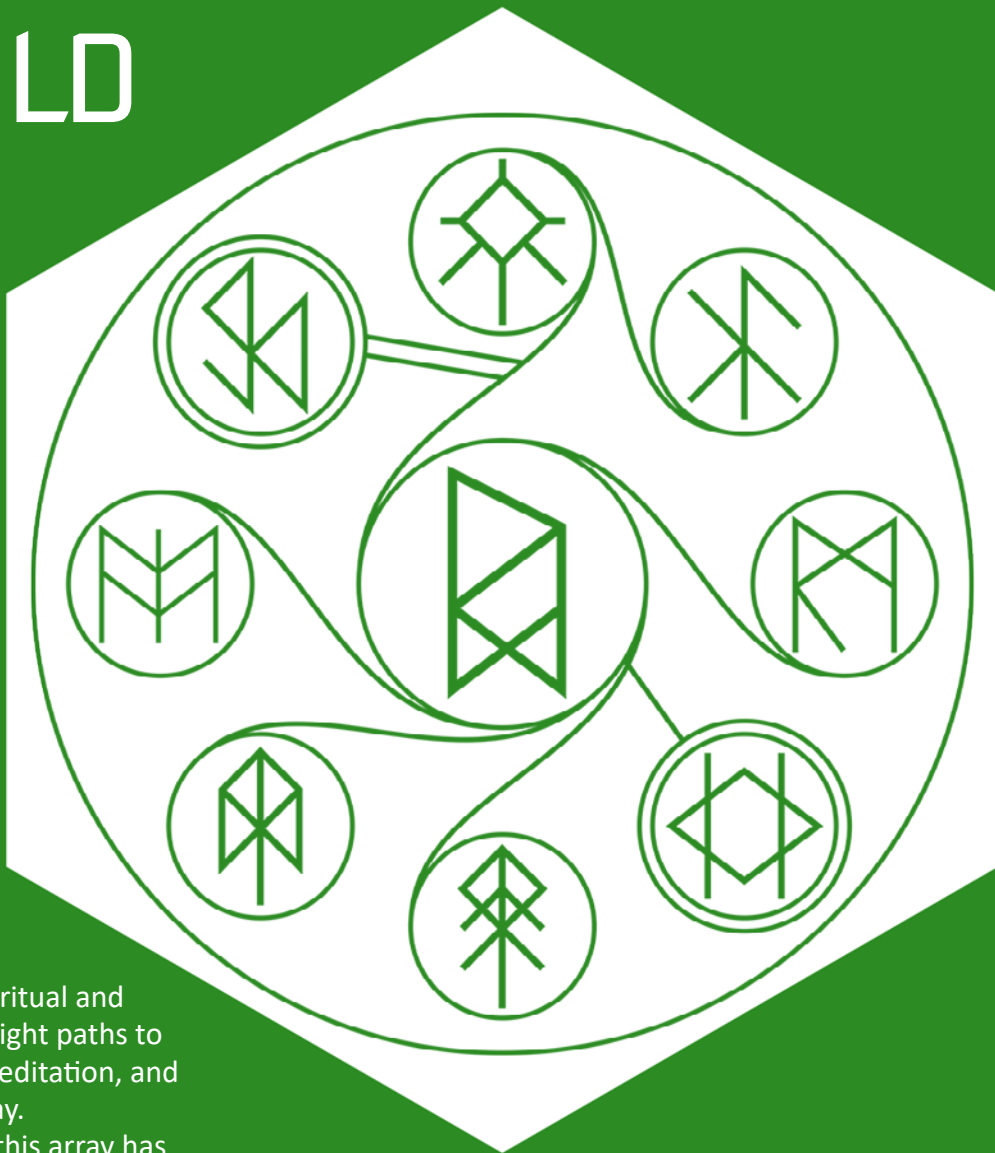
Eightfold Path requires eight hours of a dancing, ice cold flame. So the monk sits, hour after hour, day after day, week after week, until he is confident there is enough energy in the array. If he is wrong, if he hasn't waited long enough, the flame will not burn for eight hours and the monk will have to start all over again.

In Middelburg, there are precious few Uttosian monks, but the Runist monks of the Monastery in Runedal have taken a liking to this array and have started using it as a test of patience and fortitude, often assigning ill tempered apprentices to produce an eight hour flame if and when they become too insubordinate.
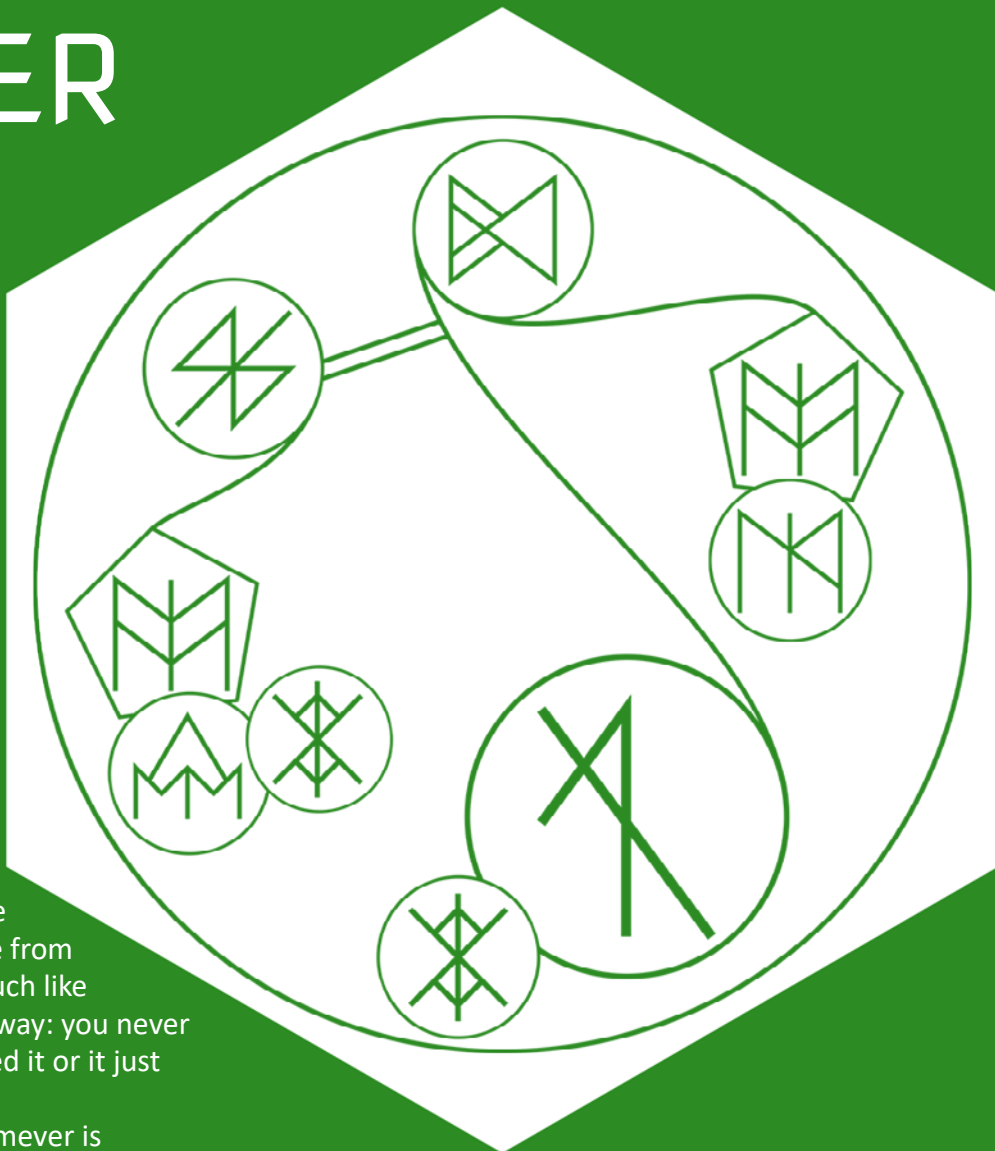
FATHOMER

Create 100 lumens of Light per cm^2 if Stone is within a distance 1000 times the array's circumference.

DESCRIPTION

While the *Fathomer* can't help you swash your buckles, it can help you continue to do so by ensuring you stay alive. The *Fathomer* is one of those arrays that you will see wherever you go, yet will rarely pay attention to. These arrays are the silent heroes of the world, keeping us alive and comfortable from the shadows. Noticing a *Fathomer* is much like noticing the railing on an elevated walkway: you never pay attention to it unless you either need it or it just saved your life.

The *Fathomer's* role is to warn whomever is helming a ship of approaching rocks. It unfortunately does not fathom as its name implies, but the fathom of the water can be indirectly determined by the size and shape of the rocks surrounding a vessel and so the mostly-incorrect name stuck. The array does this quite simply by creating an intensely bright light whenever a rock comes within a distance of 1000 times the array's circumference. Normally the array is carved onto the railings right round the ship at a size of 10cm, so if the ship comes within 100m of a rock sticking out of the water, the arrays will light up. And because the arrays are drawn all around the ship, their fields of effect will overlap meaning more than one will light up if the ship comes too close to a rock. This means that the helmsman can accurately keep track of which direction the rocks lay.

If that isn't smart enough, the way the sailors have used the *Fathomer* is. While knowing that you are within a 100m of a rock is very valuable, after the light turns on, what then? Are you within 80m of that rock, or 20m? This is very important as the rock jutting out from the water is only the tip, and it could be much larger under the waves, spelling doom for any vessel coming too close. For this reason, sailors have made variants of the *Fathomer*, lighting only up if the ship is within 50m, 25m and finally 10m of a rock. To differentiate these arrays, they have fixed coloured lenses over the arrays, with each colour representing a different distance.

Now, no matter how deep the fog is, how dark the night is, or how terrible the storm is, any helmsman can accurately tell the distance and position of any piece of land close to him, making sailing that much safer.

FIREBALL

NOTATION

Create and Contain a Ball of Fire and Push it at a speed of 32 m/s. Cast from the Right Hand.

INCANTATION

Behg Ob Vür Ant Bol Cob Dün Mok Non Hohd Non Ob Drieke Ant Schniv Fayf Cob Ent Fin Regahnd

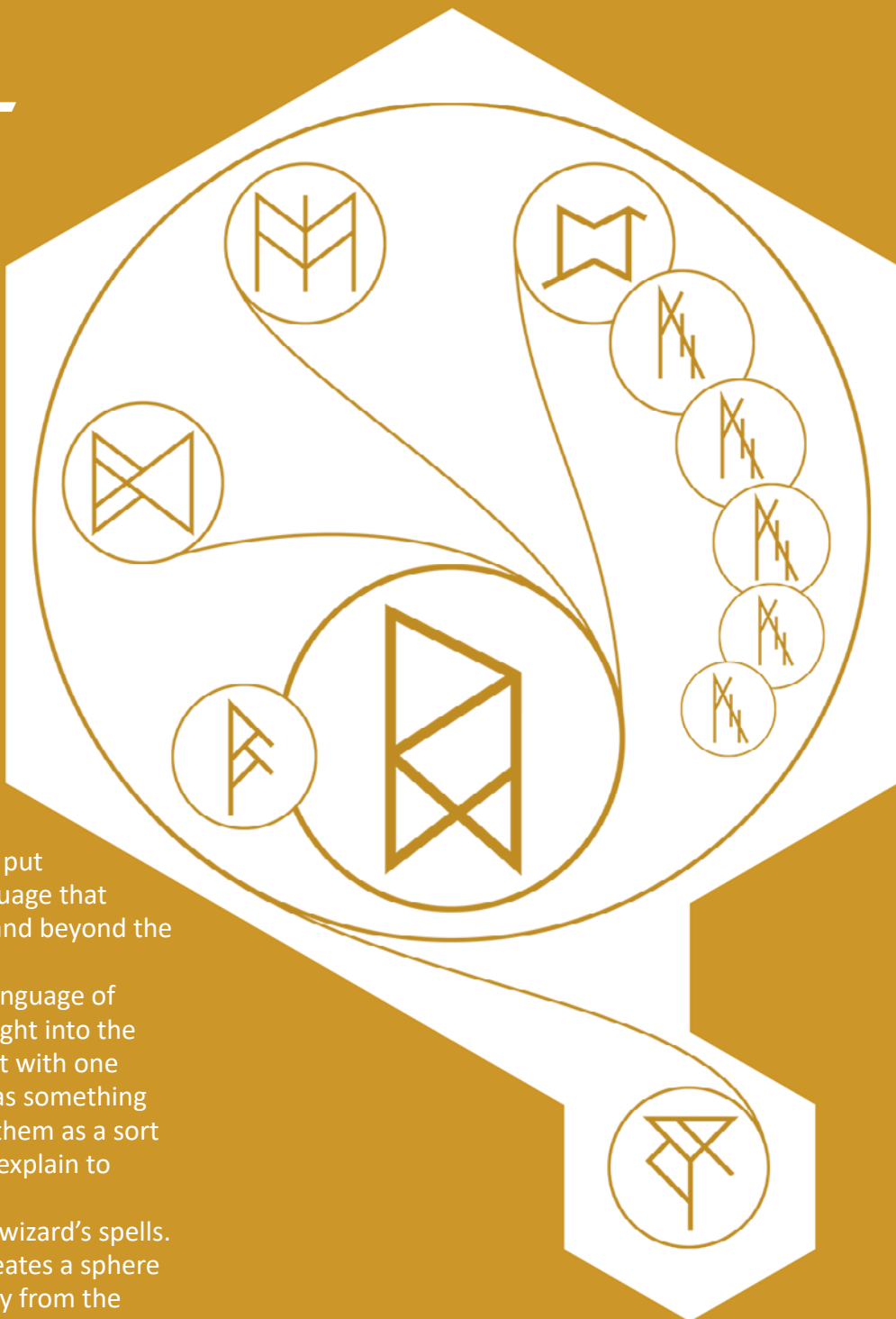## DESCRIPTION

The very first incantation!

The *Fireball* is the very first time we put thought to making arrays a spoken language that can be used outside of the *Runed Age* and beyond the limitations of the arrays.

In fact, by figuring out the spoken language of the runes, it gave us a much deeper insight into the runes themselves and how they connect with one another as it forced us to look at them as something other than mere pictures and focus on them as a sort of programming language that you can explain to someone else.

All this from the most traditional of wizard's spells.

The Fireball works very simply: it creates a sphere of fire and then forcefully pushes it away from the array (in the case the right hand). With the way it works, you can't unfortunately "throw" the fireball at an enemy, but you can dramatically hold up your hand in consolation.

One thing to note is that there is a rune in this incantation that doesn't exist even in the *Sigil System* or the *Runed Age*. It's the one that is modifying the *Fire* rune in the centrum and it is the *Sphere* rune. You can't have a Fireball without it being a ball, now can you, and unfortunately there wasn't a sphere rune available before (as it would make firearms obsolete in the *Runed Age*) so we made it specifically for this incantation.

FIRESTARTER

NOTATION

Create and Sustain a Fire
if Wood is not present and
Contain that Fire to the
boundary of the array.

DESCRIPTION

    A wise man once said that the greatest of magics could be found in the most mundane aspects of life, and like most idioms and sayings, it is truer than we would like to think. One could talk all day about the immeasurable work that goes into hand crafting a single glass, or all the inventions that were needed before our homes were so comfortably heated that we never give it a second's thought. But this is about arrays, not engineering, so let's take for example the *Firestarter* array.

    There is not a single gentleman in Middelburg that has a *Firestarter* array more than a minute's frantic search away from him. Most men keep one tidily tucked away in a breast-pocket and ask any barkeep, or even a priest and they would be quick to produce one. This is not because most men in Middelburg are raving arsonists, but rather that the *Firestarter* array is used to light pipes, hookahs, candles and even a stubborn hearth or two.

    A firestarter, the contraption not the array, is a small wooden cylinder with hinged wooden cap that can be tightly closed. On top of the cylinder, and enclosed by the cap, is the *Firestarter* array. Needless to say, that is all there is to this array. Flick open the cap, and the array is activated, creating a small and manageable flame. Close the cap and the presence of the wood will deactivate the array. Because of this If-Then statement, the array absorbs energy throughout the day while it is not in use and then expends it when it is. The movement inside a man's pocket is more than enough to charge an array that you only need for a few seconds at a time.

    Of course, a firestarter can be made of many materials and the wealthier a man becomes, the richer his firestarter. When this is the case, the *Wood* rune in the centre is simply replaced by whatever material the firestarter's cap is made from.
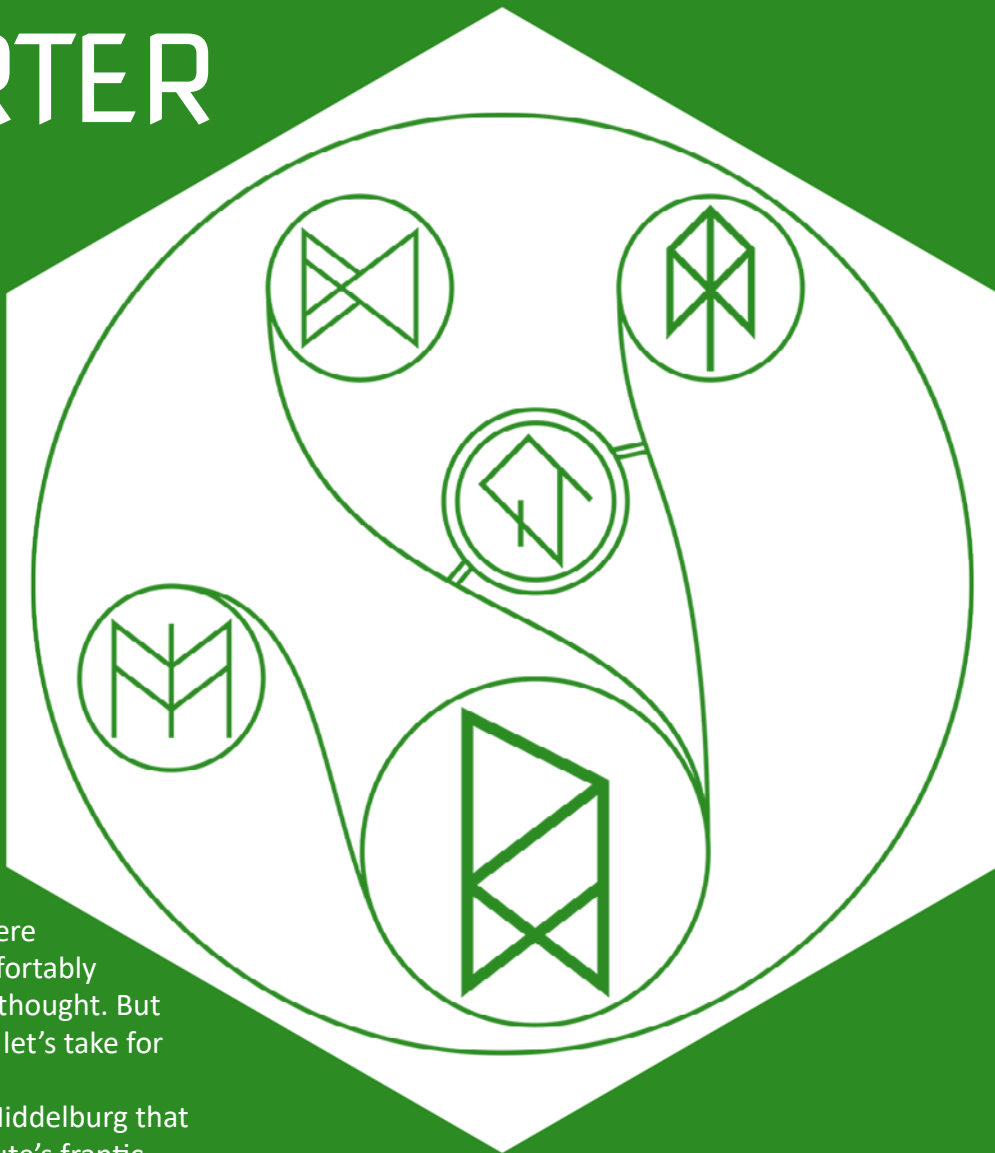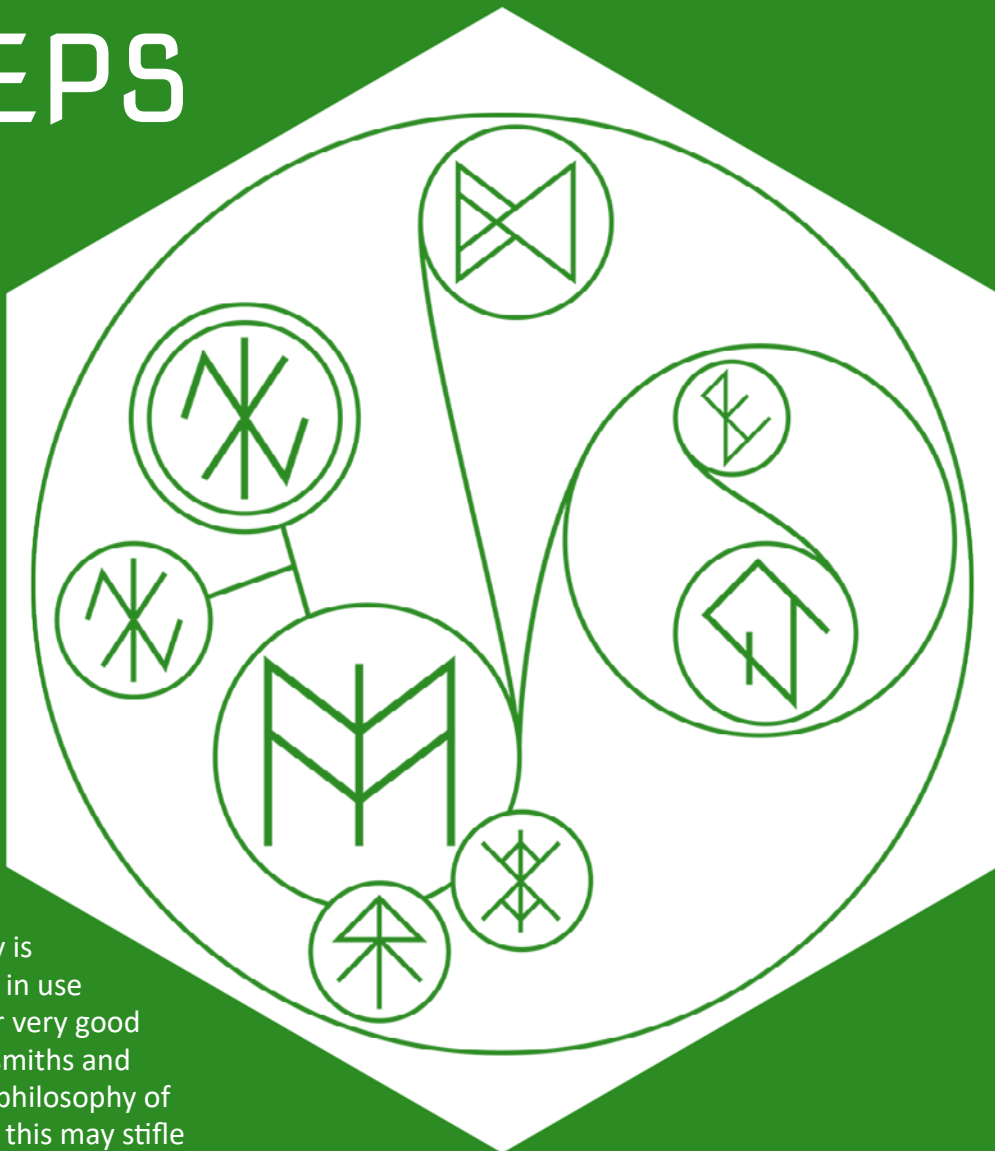
FIRST STEPS

NOTATION

Create a Containment field 10 times as wide as the array with a depth 1/10th of the array's circumference that excludes Air if Air is present. Apply the effect of negativing gravity on Wood to this Containment field.

DESCRIPTION

Its notation is quite a mouthful and it certainly isn't the prettiest thing around, but then the most practical of things never are. The *First Steps* array is counted among the oldest of arrays still in use in Alfresia and around the world and for very good reason: it works remarkably well. Runesmiths and Runecrafters predominantly follow the philosophy of "if it isn't broken, don't fix it" and while this may stifle innovation, it has meant the *First Steps* has served humanity well for over fifteen centuries. In saying that, it is only in the last two years that this array has come into its own and went from a half forgotten dream to one of the most valuable arrays in the world.

The reason for this is simple: *First Steps* require a phenomenal amount of energy. What it does is create a containment field around the ship's hull that negates the effect of gravity on it (or at least the wooden parts of it) making it nearly as light as a feather as well as destroying all air that comes close. All of this means is, when this runic containment field is active, that the airship floats through the air almost as if through the vacuum of space. There is nearly no weight to it and there is no drag and air resistance. It makes airship travel quick and efficient (and therefore desirable), but it takes a monumental amount of energy negate the effect of gravity on nearly an entire ship for the whole duration of a flight as well as destroying how many thousands kilolitres of air that the ship passes through.

For the fifteen centuries this array existed, it has worked… technically speaking. It did, as still does, exactly what it is meant to, however there has never been a reliable enough power source to feed this array until the discovery of the *Lightning* rune and the invention of the runic batteries. Before this, folks had to precharge these arrays with heat and light and hope that the arrays held enough energy for the entire trip. More often than not, they didn't, and so the proto-airships fell from the sky one by one until it was unanimously, and unspokenly, decided by everyone with more than two braincells that airtravel was too dangerous… until the *Lightning* rune changed all that. Now, the race to conquer the skies has begun and already there are dozens of airships sailing on the clouds above Alfresia.

FOOTMEN'S SIGNET

NOTATION

Create ?????? if Human is present within a space the diameter of the array and 1/100th as deep.

DESCRIPTION

Just like with the *Remote Trap* array, the *Footmen's Signet* is meant for you to add in whatever array you want to the centrum and thus change the effect, but not the purpose, of the array. Built with variety in mind, this array can accommodate a wide range of arrays, however as it only activates when a human (nearly) touches it, one can see how the purpose of this array if firmly fixed.

As the name implies, the *Footmen's Signet* is meant to be engraved onto a signet ring to be worn by footmen and other assorted criminals. Each thief, burglar and killer will of course choose their own arrays to go into the centrum, but it will almost always be activated the same way: by punching someone. As such, the arrays most often put into the centrum tend to be more offensive in nature than utilitarian, and defensive arrays are a rare sight.

And of course the potential variety of the array increases tremendously once you realise you can wear multiple signet rings on one hand, each with their own unique array in the centre, so if you can't see how to get the right effect you want from a single array, simply create two and have two *Footmen's Signet* rings on a hand.

One might argue that putting a potentially lethal array on a ring that activates on contact would be quite dangerous to whomever is wearing it, and the answer would be both yes and no. Yes, when you start wearing such a ring, you need to make sure you never accidentally touch yourself with it, but the fact that you need to nearly touch it (and bearing in mind a signet ring is most commonly 1-1.5 cm across, meaning you would have to come within 0.1-0.15mm of the array to activate it) means as long as you are wearing semi-thick gloves you can easily touch it without activating it.

One thing to keep in mind as you peruse the array is that, while the *Create* rune is a fixed part of this array, you can still transmute materials. As you are putting an entire array into the centrum, the Create rune is not affecting any and every rune inside, but is rather creating the effect of the array. For example, let's say you put the *Sculptor* array in the centrum, then the *Create* rune would simply be creating the *Sculptor* effect, rather than trying to create a transmutation. A subtle distinction, but an important one.

FRIENDLY WARNING

Create 1000 Lumens of Light per square centimetre if a Human is within 10 times the size of the array's diameter.
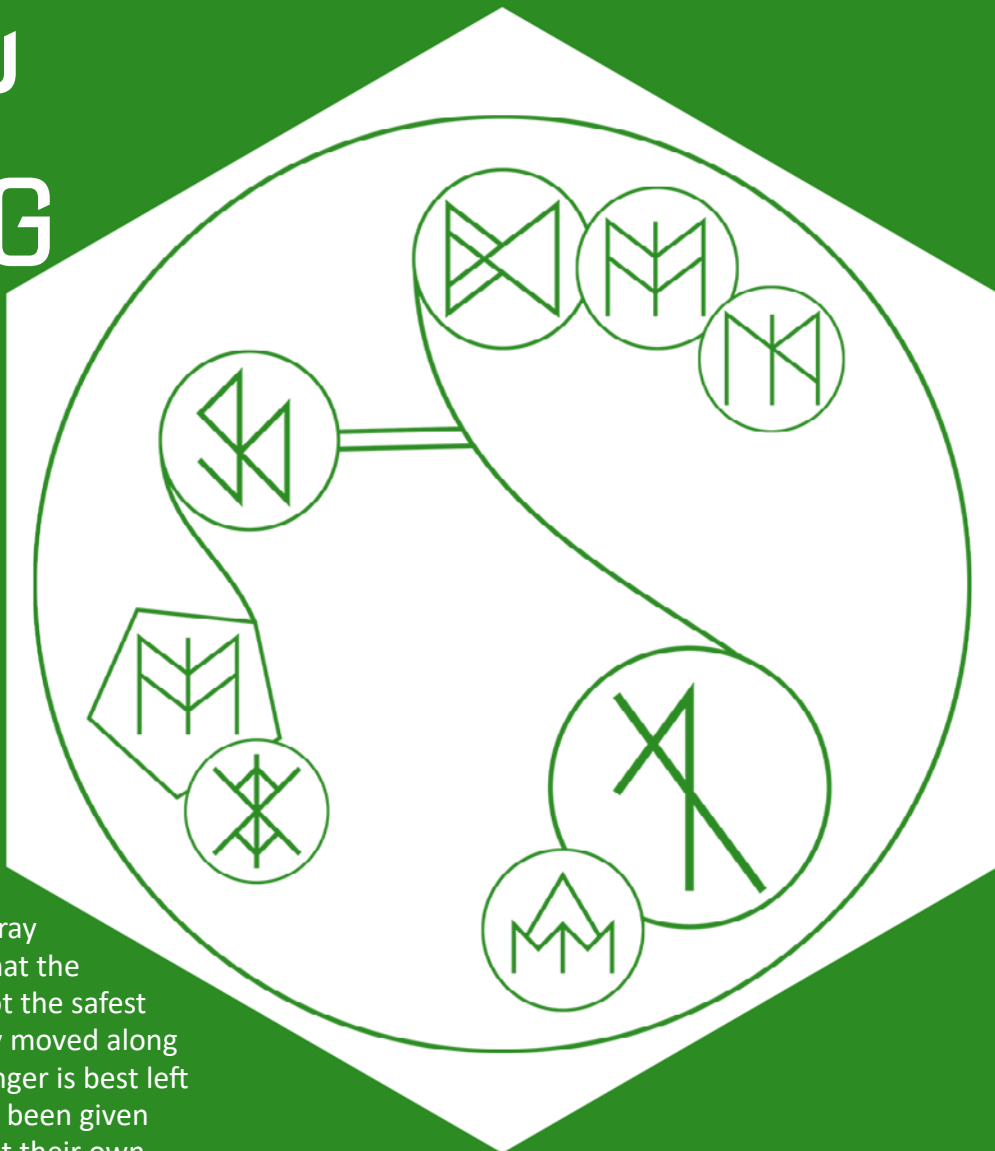
DESCRIPTION

Not every trap has to be lethal, or even harmful. Sometimes a trap is just there as a warning. Much like "Beware of Dog" signs on the fence around a person's home, the *Friendly Warning* array was created in order warn passer-bys that the area they are walking into is perhaps not the safest one to be in and it would be best if they moved along quickly. Whether there is in fact any danger is best left to the imagination, but the warning has been given and so the person entering is doing so at their own risk.

The *Friendly Warning* is usually placed in alleyways belonging to gangs, around areas being investigated by constables or even out in the wilderness where the military is busy with their wargames. Because of the If-Then statement in the array, the array can be placed and forgotten as it will absorb energy from its surroundings, slowly but surely, and expel them only when it has been triggered by a passing human.

While the array is fairly common in Middelburg, it comes as quite a surprise to even those looking for it because a 1000 lumens per square centimetre is a like a lightbulb going off against your eyeballs. That is half the point, because should anyone come with any nefarious intentions, the array will momentarily blind them and leave them open for attack. Anyone with half a mind will quickly take cover and hope they are still in one piece. If they came at night, then surely everyone within a 100 metres saw that sudden flash of light and will know where it came from, meaning any element of surprise has been lost. Hopefully this will mean the attackers withdraw and no blood has to be shed this night.

However, the use of the *Friendly Warning* array comes down to the morality of a person. Because it is a trap, because it suddenly blinds a person, and because it will light them up like a full moon on a cloudless night, it is far too easy to take advantage of the situation. More than one killer has placed this array in narrow street and alleyways, waiting for a person to trigger the array, become stunned and then shoot the poor unfortunate so lit up like a noon day sun.

This is an array whose lethality is entirely up to you, so what will you choose?

FURIOUS BREATH

Rotate Air at a speed of 128 revolutions per second and Contain this rotating to the border of the array.

DESCRIPTION

In the Uttosian language of the far eastern continent, this array is technically called "The Furious Breath of the Four Divine Winds", however that is such a mouthful when translated into Alfresian, that the locals here simply call it the *Furious Breath* array and then promptly banned its usage under penalty of death. You see, the *Rotate* rune and this array was only discovered by the Gaelish colonial forces in Uttosia a few months back after years of the Uttosians hiding it from them, yet still using it against them to wreak great havoc. While the more mathematical among us might see great usage for the *Rotate* rune in an engineering capacity, it can cause death and destruction on the likes few have ever seen, and that is why the Alfresian government immediately regulated the use of the rune and banned the use of any array using it which can cause harm.

On the vast stepped plains of Utossia that the Gaelish forces have been battling for the past few decades to carve out a small spot for them, the *Furious Breath* works at its very best. The array, often carved of solid gold to be easier seen from a distance, and often activated by an additional If-Then trigger, is carved to be one meter in circumference so that the 1 revolution per second that the Rotate rune causes becomes in effect a 1 meter per second effect. This makes it easier for the Uttosians to calculate how strong a "breath" they should unleash.

The *Furious Breath* rotates air at a speed of 128 meters per second, or 460 kilometers per hour, enough for us in the real world to classify it as an F5 Tornado. With the warm climate of the steppes, the array only needs to start the tornado before the environment will keep it going for as long as it needs to decimate an entire colonial army, town or even a city. When the Gealish first came to Uttosia to set up their colony, it
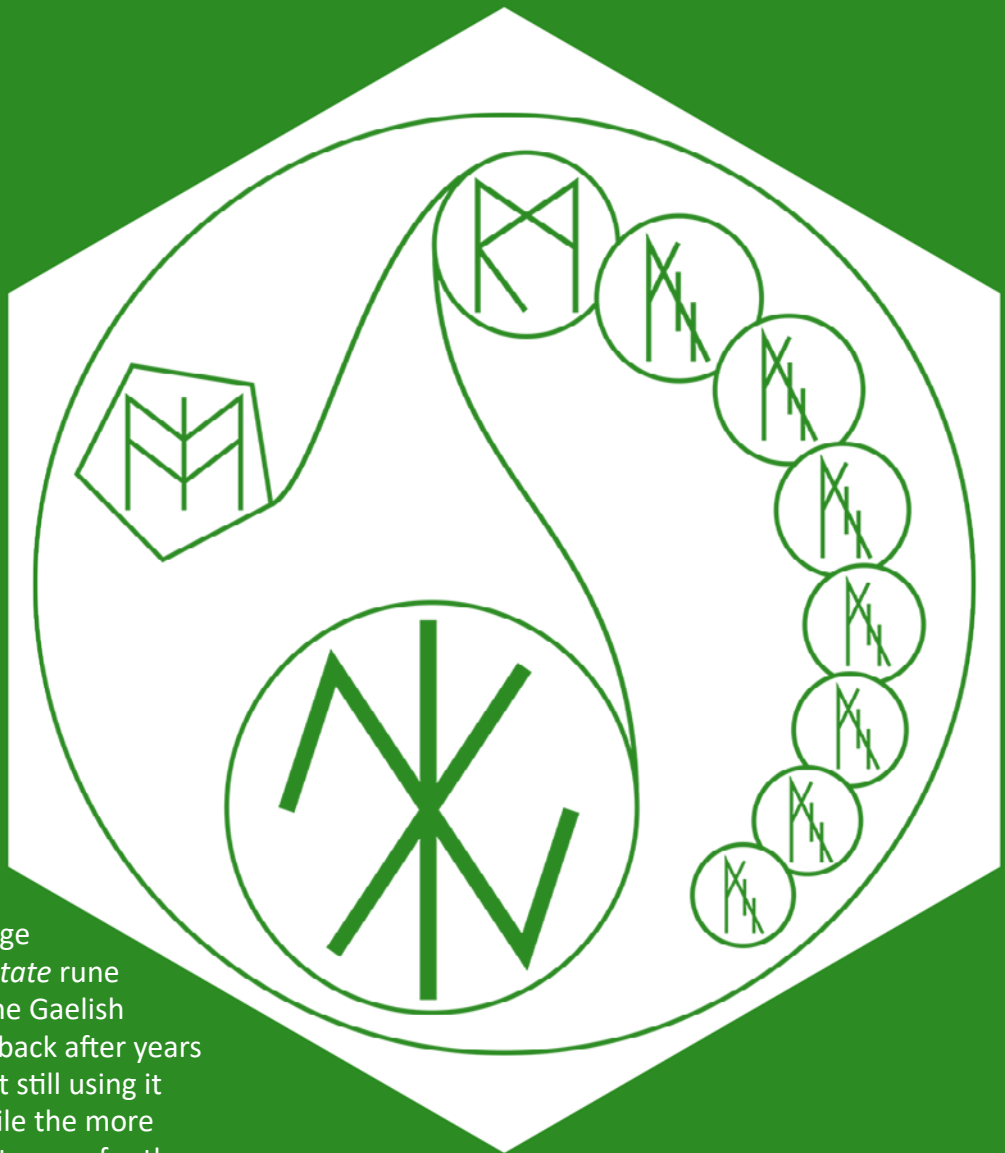
didn't take long for them to start calling it the Land of Storms and never has a month had gone past where there hasn't been an incredible tornado destroying everything the Gaelish had been trying to set up.

On this side of the ocean, the nations and kingdoms and states are doing their best to keep this array and the rune well regulated but they know it is a futile effort. Already there has been a horrific tornado in the Heavenly Empire of Man that killed thousands and they say that a mammoth waterspout destroyed a Wesfresian fishing fleet. The kings, princes and presidents hope that the people will come to fear and respect such a rune... before it is too late.

GILDED TOUCH

NOTATION

Transmute Animals and Plants into Gold and Contain this transmutation to the circumference of the array and as deep as 1/100th the diameter of the array. Cast from the Right Hand.
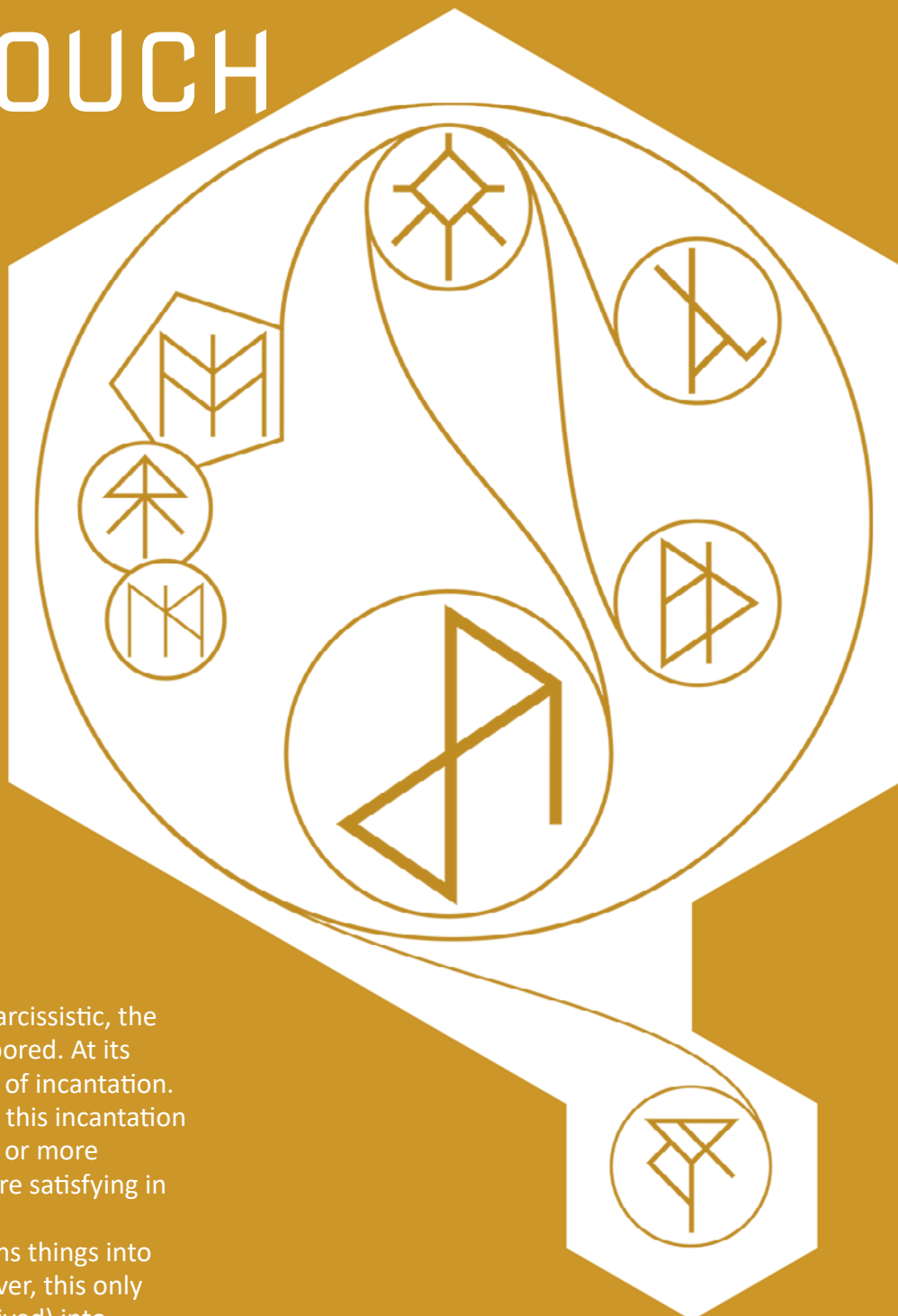
INCANTATION

Behg Gelout Dün Ferformyr Dün Dyr Non Stamkur Ent Hohd Ant Rônde Ant Klen Ent Fin Regahnd

DESCRIPTION

It is an incantation meant for the narcissistic, the artistic, the sadistic or those just plain bored. At its heart, one can call this a whimsical sort of incantation. There is clearly no practical purpose for this incantation that a dozen others couldn't do quicker or more efficiently. However, this array is far more satisfying in that it adds a personal touch.

To put it simply, this incantation turns things into gold. Unlike the Midas of legend, however, this only turns living things (or things that once lived) into gold. Only plants and animals are included in this incantation although it is very easy to swap out the *Animal* and *Plant* runes for whatever materials you wish to transmute. There is also a secondary restriction to this golden touch in that it has to come from the right hand (or which ever location you specify in your incantation). This way, you have at least one free hand to use while your other one creates golden statues.

In fairness, the *Contain* and *Circle* runes which restricts the effects of this incantation to a near direct touch by the right hand is not just there for the dramatic symbolism of a simply touch turning the living into cold, dead, immortal gold; it also acts a safety feature. Remember that humans too are animals and if this effect was not contained to such a degree, a mere wave your right hand in the direction of your body could turn you to gold as well. With this feature you would have to deliberately touch yourself in order to turn yourself to gold.

For those wishing to use this as an array and not an incantation, simply remove the external *Right Hand* rune and locus and this array is well suited for a blade that could literally slice gold ribbons out of a person. Put this array on a firearms' rounds, replace the *Contain* rune with If-Then *Animal* or *Plant* loci and you have a golden version of the *Sculptor* array. Always keep in mind how you can change and adapt arrays and incantations to your needs.
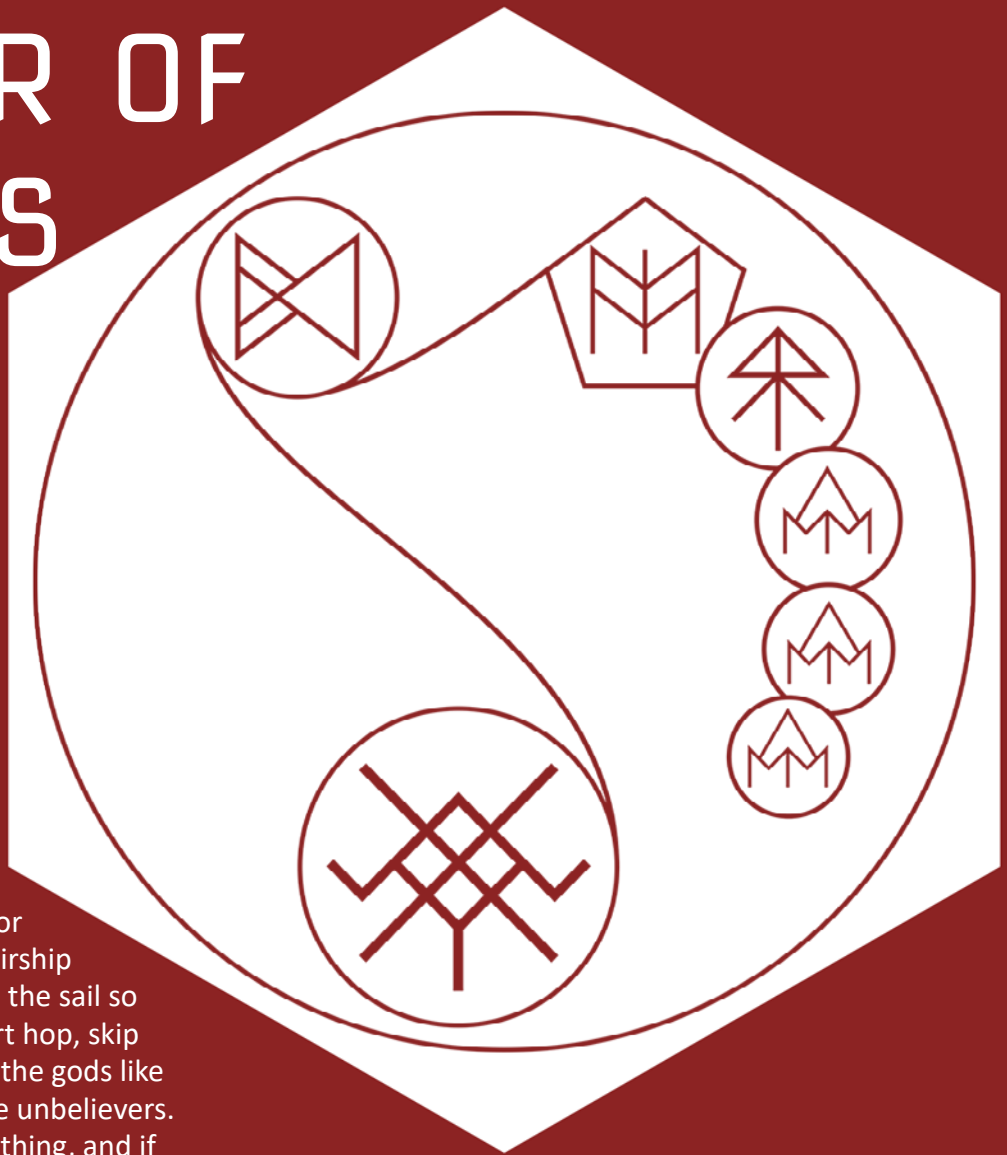
HAMMER OF THE GODS

NOTATION

Create Lightning in an array Contained to the circumference of the array and to a length 1,000,000 times that of the array's diameter.

DESCRIPTION

Never have so many thunderstorms graced the world of the Runed Age since the discovery of the *Lightning* rune two years ago. Once men learnt how to put ships up among the clouds, it did not take long for the megalomania to set in and for the airship captains to think they are as gods when the sail so high above the world. It was only a short hop, skip and a jump to the idea that the activity the gods like the most is to hurl down lightning at the unbelievers. History and legends are full of this very thing, and if man is so great as to fly among the clouds, why can't he hurl lightning like the vengeful gods above?

That is where the Hammer Cannons with their *Hammer of the Gods* arrays comes into the picture. The Hammer Cannons are simply wooden poles one metre long and twenty centimetres across, set on a swivel and having a trigger. At the front of this is the *Hammer of the Gods* array. It is slightly different to the array you see here as it includes an If-Then trigger so that it can be charged with energy and fired upon command. The cannons are made of wood as it is the most non-conductive material airships have and this is much needed as when the cannons fire down at the world below the airships and the planet are connected (for just an instant) with a brilliant beam of lightning. It does not take many of these thunder shots for the Hammer Cannons to be burnt beyond recognition, but they are simple stumps of wood and are easily replaced.

This array and the cannons that use it are terror weapons, made to reduce the morale of whoever they are firing at. *Lightning* can easily kill, but it is the sound of the thunder and flash of light that can turn night into day that makes this array so valuable. More than any other weapon, these Hammer Cannons can drive the toughest and hardiest of men into buildings where they lie cowering beneath tables. And when two airships battle it out amongst the clouds at night, the whole air seems electrified as they shoot dozens of lightning bolts at each other a minute, the light unbelievable and the sound monstrous to the ears.

HEARTFIRE

NOTATION

Transmute, within an area 100 times greater than the array, Blood into Fire if Human Blood is present, and Sustain that Fire.

DESCRIPTION

The sadistic footman who first came up with this array's design called it *Heartburn* in a dark and ironic attempt at humour. After seeing the horror that it can inflict upon the human body, everyone else in the city decided that perhaps this was one of those things best not joked about. And so the name *Heartfire* came about. Not as humorous nor as accurate anymore and, when first heard, it does make the array seem far more gentile than it truly is.

At first glance, the way this array works seem fairly straightforward: it transmutes blood to fire and sustains it; since this only happens in the presence of human blood, you can tell that it is intended to work inside the human body. Thus, it is easy to work out that the intention of this array design is to create a fire within the human body, presumably in order to create as much pain and suffering as possible in order to keep an enemy occupied and distracted while you do what you do best.

However there is one thing that's missing: this array has an insidious nature that works within a loophole of the rules of the arrays, and more specifically the way that the array's field of effect works.

An array's field of effect stretches out from the array in all directions facing forward from the centrum. Put it flat on the ground and the field will move left and right, forward and back, and up but not down. If there is no *Contain* rune or *Size* rune applied to the array, then the field of effect will equal the energy put into array.

This is all well and good, but there is a limitation to the field of effect. While it can flow around objects, it cannot move through them unless they are targeted by the array. Put a rabbit on top of a table, and an array below it with a array that simply says *Create* a *Containment Field* that *Excludes Rodents* and the nothing will happen to the rabbit. That is because the table is blocking the containment field (the array's field of effect). If the array said *Create a Containment Field* that *Excludes Rodents* and *Wood* then goodbye Mr. Rabbit, because now the field of effect is targeting the table it can move through it.

And so with *Heartfire*. Ordinarily, blood inside a human cannot be targeted because your skin blocks the array's field of effect. But break through the skin, with a bullet inscribed with this array for example, and then the blood is fair game. Mostly, the body is filled with small capillaries and veins that can be closed off by muscle movement and collapsed by sudden and severe trauma, like a bullet inscribed with this array for example, and so the blood that this array affects will only be that pooling around it. However, should you be lucky enough to strike a major artery (or even the heart itself) then this array's field of effect can flow into nearly every artery it can find, transmuting blood across the body into an everlasting fire.
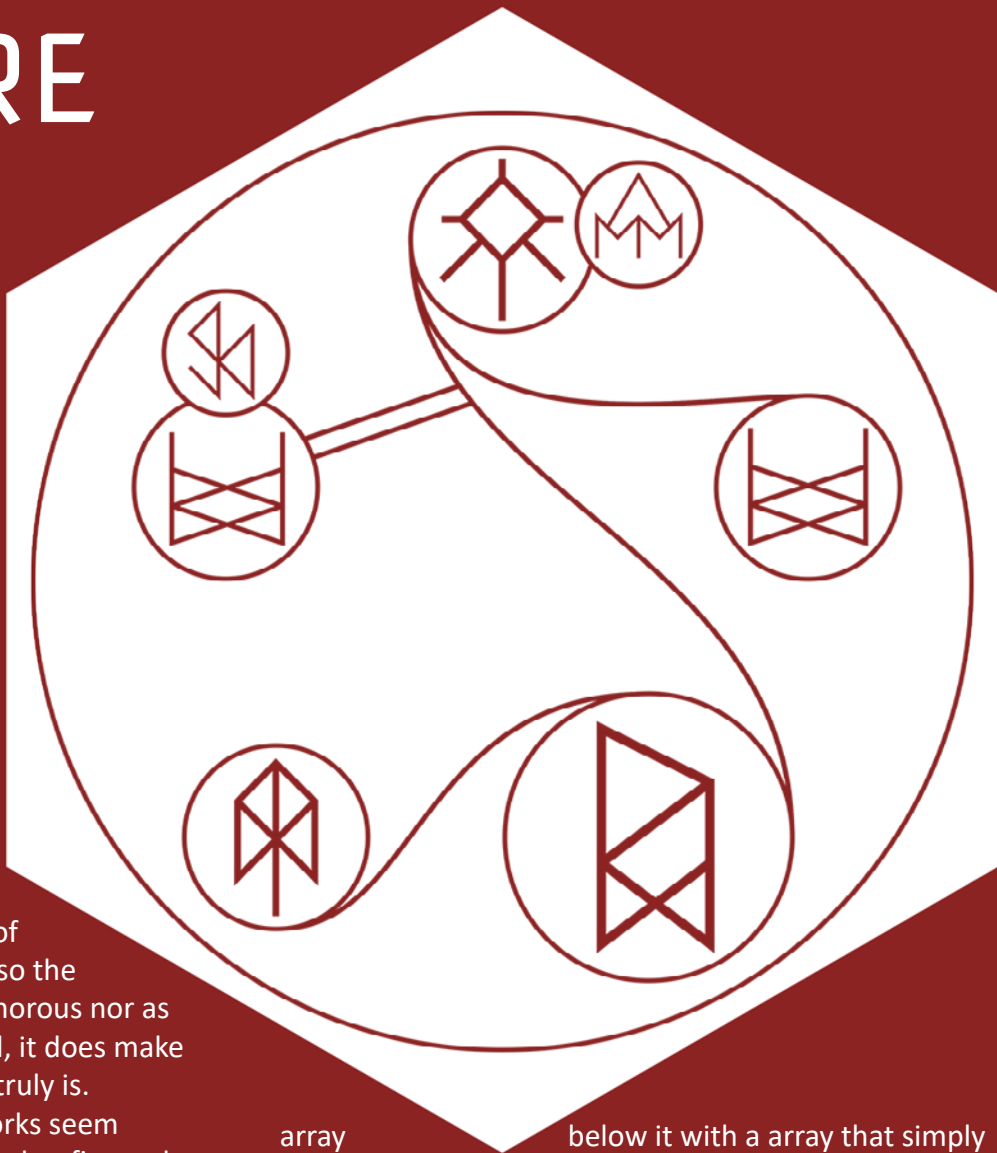
HELL PLAIN

NOTATION

Transmute, within an area 1,000,000 times the size of the array, Stone into Carbon and apply the effect of Created and Sustained Fire to the Carbon.
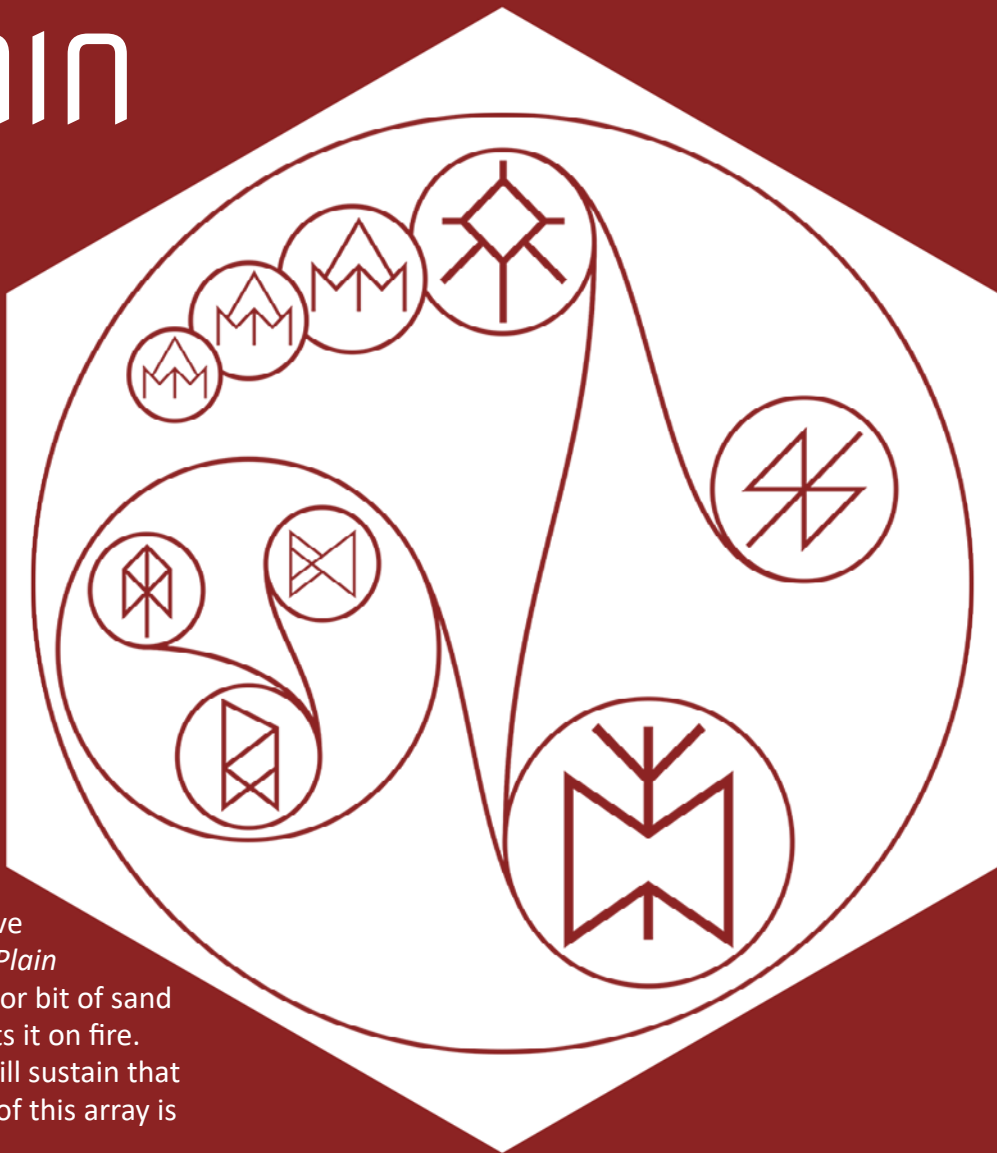
DESCRIPTION

Most people only have their imaginations to help them when it comes to picturing what hell looks like. Those who have seen the *Hell Plain* array in action don't need their imaginations any more for this, they have seen hell with their own eyes. The *Hell Plain* turns any stone, brick, soil, clay, pebble or bit of sand into amorphous carbon (ie coal) and sets it on fire. Keep coal burning long enough and it will sustain that fire all on its lonesome, so the fire part of this array is only intended to start that reaction.

The first thought at seeing this array might be that it is meant to incapacitate opponents by turning the ground they are standing on to burning coal, or perhaps it is a means of losing pursuers as they would want to get their hands on you somewhat fiercely if they are to cross burning coals voluntarily. One might even think that this array is meant to destroy buildings or entire towns (noting the size of the transmutation), and while it has been used for all of this and more, the purpose of this array is actually more sinister than any of that.

A scorched-earth campaign is when a military force denies its opponents the resources they need to survive and fight back. This can be any type of resources, but as the name implies, a lot of comes down to literally scorching the earth and salting the lands afterwards in order to destroy farms and crops and ensuring nothing can be planted there again for the foreseeable future.

This is precisely what this array is meant to do, but it goes one step back and an intensity further. It doesn't salt the land, but you don't need to afterwards. A field of coal set alight will burn for weeks if not months and then for ages afterwards the soil will be far too hot to sustain plant life. All it takes is one primed cannonball to turn everything within 30 kilometres or so in a hellscape and starve the thousands around it who depended on that farmland. All it takes is one determined army to turn an entire country into a living hell. This is precisely what happened during the century long Delkan Holy Wars, and nearly half of the Delkan nations are now barren, black fields where nothing has grown in centuries.

Of course, you could simply use it on the enemy armies and give them a taste of hell before they get there, and this is precisely what the mad king Markus VI did when the Heavenly Empire of Man invaded Fresland. The western marches of Wesfresia today is now called the Black Border with the Empire and if you go digging in there, you don't need to dig awfully far in order to find whole platoons of skeletons fused into their metal armour.

HELLISH REBUKE

NOTATION

Transmute, within an area 100 times greater than the array, Humans into Wood if Human Blood is present, and apply the effect of a Created and Sustained Fire to Wood.
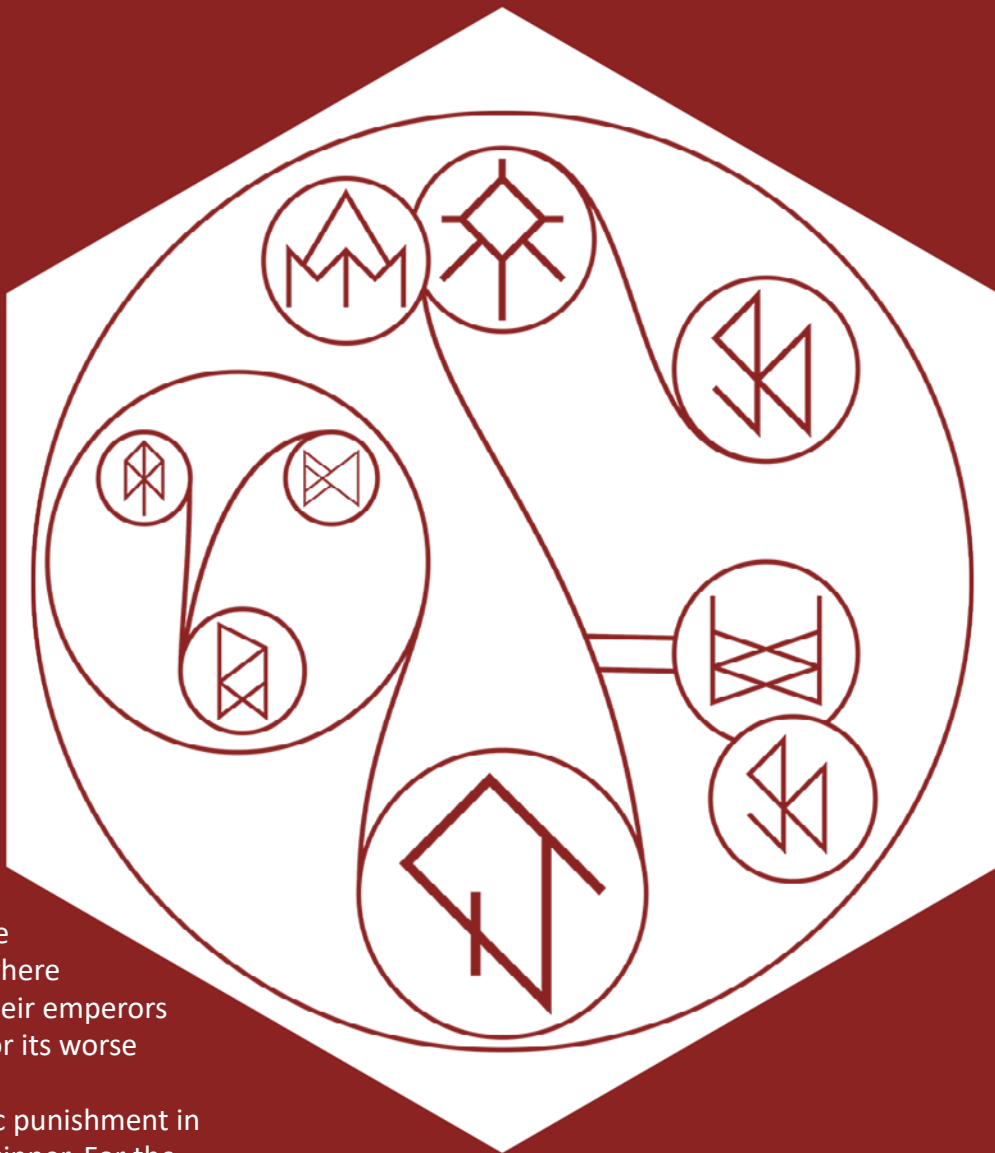
DESCRIPTION

At a quick glance, you might be forgiven for mistaken this array for the *Sculptor*. They both work in a fairly similar fashion and, unbeknown to most, they have share an origin in the old Western Neoist Empire. However, where the *Sculptor* was used to immortalise their emperors in stone, the *Hellish Rebuke* was used for its worse criminals.

In the Neoist faith, there is a specific punishment in the afterlife meted out to each type of sinner. For the violent and murderous among us, their punishment was to be turned into an olive tree and set alight for all eternity. The supposed irony of this punishment has been lost over the centuries, but not the method, and while there is no rune for olive trees, a simple *Wood* rune suffices. From that time, and even today in the smaller towns and far flung villages, the Kaíns (the Neoist priests and judges) would use the *Hellish Rebuke* on the murderers in their midst.

The array transmutes the human into wood before setting him on fire, and so it is completely painless. This is hardly a cruel punishment, and it was never meant as such. The *Hellish Rebuke* is not meant for the condemned prisoner, but for the audience instead. This means of execution is a warning to those watching, a vision of what awaits them in the afterlife should they too follow down the violent path. By the time the fire has completely consumed the wooden statue, the message has sunk deeply into the minds of the audience and for a while at least the towns and villages would be free of crime. For a while.

In Middelburg, however, no amount of dire warnings and extravagant means of execution can stop crime. It's as much a part of the grand city as the bricks in its buildings. But it does serve well as a warning not to enter an area. Rather than a vision of eternal punishment, the *Hellish Rebuke* has become a grisly scarecrow used by the gangs of Middelburg to mark their territory. The few Neoists in the city has taken great umbrage at this, but the few who have tried to intervene merely became more burning effigies to the gangs' bloodlust.

Even the footmen, ever practical as can be, have taken a liking to the *Hellish Rebuke*. Not as any sort of warning, be it territorial or eternal, but for the sheer shock value. Working in the dark as they often do, having a comrade suddenly become a burning wooden statue would go a long way to demoralise you, and the sudden bright fire would expose your position and reveal you to your enemies. All in all, being on the receiving end of a musket round engraved with this array is not a terribly good thing. The one doing the shooting, however, would be more than cheerful at seeing his results.

HOPE'S FALL

Float Human and apply the effect of Pulling Wood at a speed of 2 m/s to Human, both only if Humans are present.
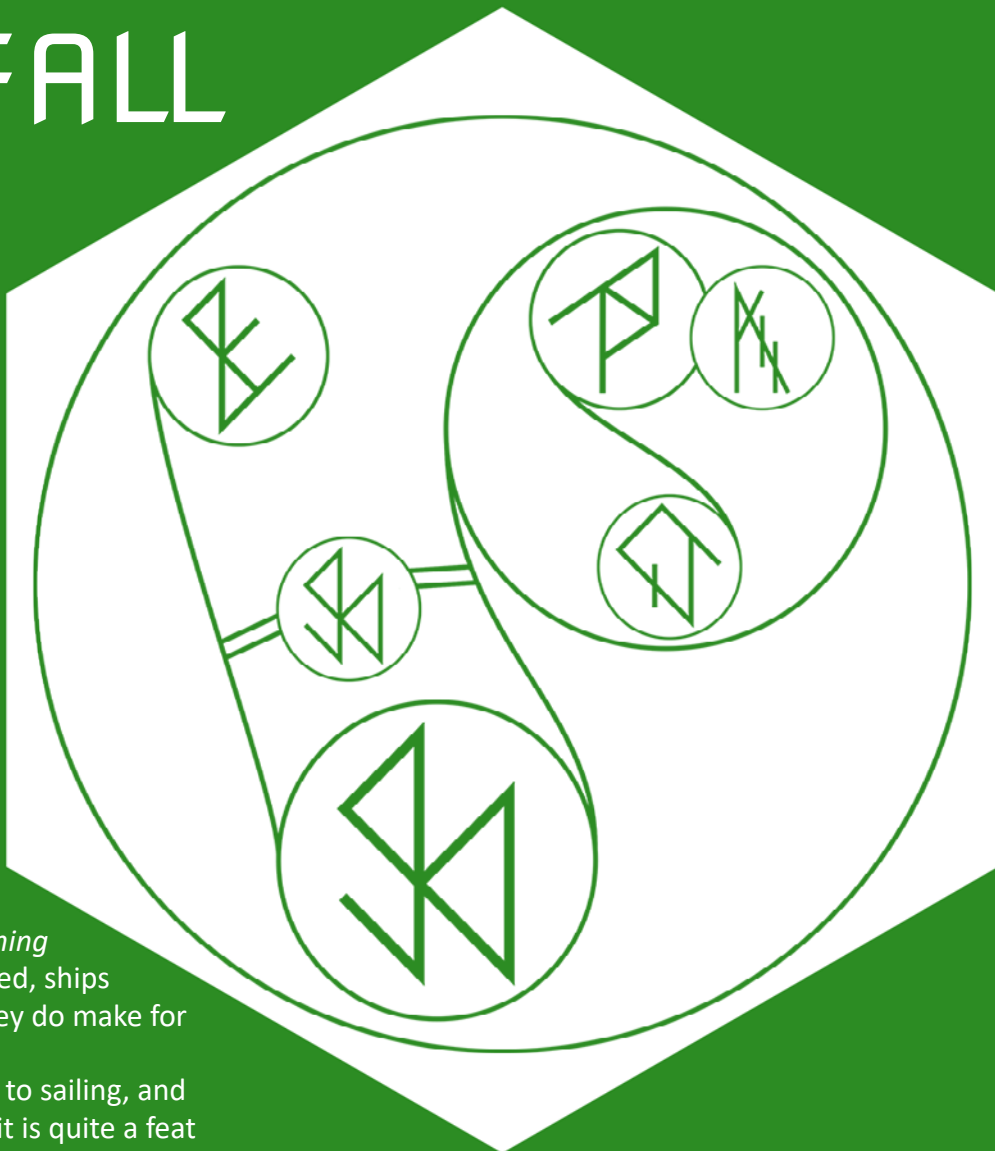
DESCRIPTION

The *Hope's Fall* may seem confusing at first (after all, why would you want to turn a human into a floating magnet for wood?), but the picture will become so much more clearer when you remember that there are not only ships on the water any more. No, since the advent of the *Lightning* rune and the runic batteries that followed, ships now fly through the air, even though they do make for quite cumbersome birds.

Airships provide a distinct challenge to sailing, and not for the reasons you may think. Yes, it is quite a feat to get a ship up into the air and keeping it there, but for once this is a occupational health and safety issue. You see, if someone falls overboard on a water-going ship, they fall into the water. Nice, safe, soft water. You fish them out, give them a shot of rum and they are back on the job. However, when someone falls overboard on an airship, no amount of rum will help them.

When the umpteenth sailor met their grizzly end going at terminal velocity, the airship companies decided enough was enough and something had to be done about it. What they ended up with, after much deliberation and dubious testing, was the *Hope's Fall* array. This was to be carved and painted onto the outside of all airship hulls in order to stop the onslaught of accidental parachute-less parachuteers. The airship hulls are made of wood, and so when a human passes by this array, it would stop the effect of gravity on that person and turn them into a wood magnet, causing them to float towards the airship. If they are falling too quickly, there are more than enough of these arrays on the ships' hulls to slow their descent.

The *Hope's Fall* array can also be used for more malevolent purposes as well. The footmen in the dark alleys of Middelburg have often found use for making someone fly into a wall or straight into an ambush without their knowledge or consent. You can simply replace the *Wood* rune for *Stone* or *Iron* or anything really and this array suddenly becomes a person-mover array for you to use.

ICE BOMB

Create Water in an area 200 times the size of the array and Cool it at a rate of 64 Degrees Celsius per second if either Wood or Stone is present.

DESCRIPTION

   If you think this array looks and sounds anything like the *Sound Bomb* or *Smoke Bomb* arrays, then you are right on the money. The *Ice Bomb* array is another variation of "let's inscribe an array on small metal balls and throw them around" type of array that seems to work so well in the cramped streets of Middelburg. And the cramped streets of Middelburg is exactly why this type of array works so well: when you don't have much space in which to manoeuvre then whoever controls that space will undoubtedly walk away from the fight with (most of) his limbs intact.

   This array works very simply: it creates a lot of water and then near-instantly freezes it. Unlike the *Ice Stone* array, this one is not designed to trap opponents (although no one will be unhappy should that eventuate), instead the *Ice Bomb* is meant to obstruct and impede your opponents. If the array is only 1cm across then the chunk of ice it will produce will be 2 metres in diameter. No imagine throwing half a dozen of these behind you in a cramped alleyway as you are running away from your pursuers (we would hate to imply the constables); the entire alleyway would be filled with rock hard ice that your pursuers will now have to clamber and scrabble over if they want to reach you. You on the other hand have all the time in the world now to make your escape.

   One design feature to note with this array is to show you that you can combine If-Then statements and share them between two different loci. As you can see, both the *Create* and the *Cool* loci share an If-Then statement. It would make no difference to the effect of the array if you were to give them their own one each, however it will save you time and effort were you to simply combine them.
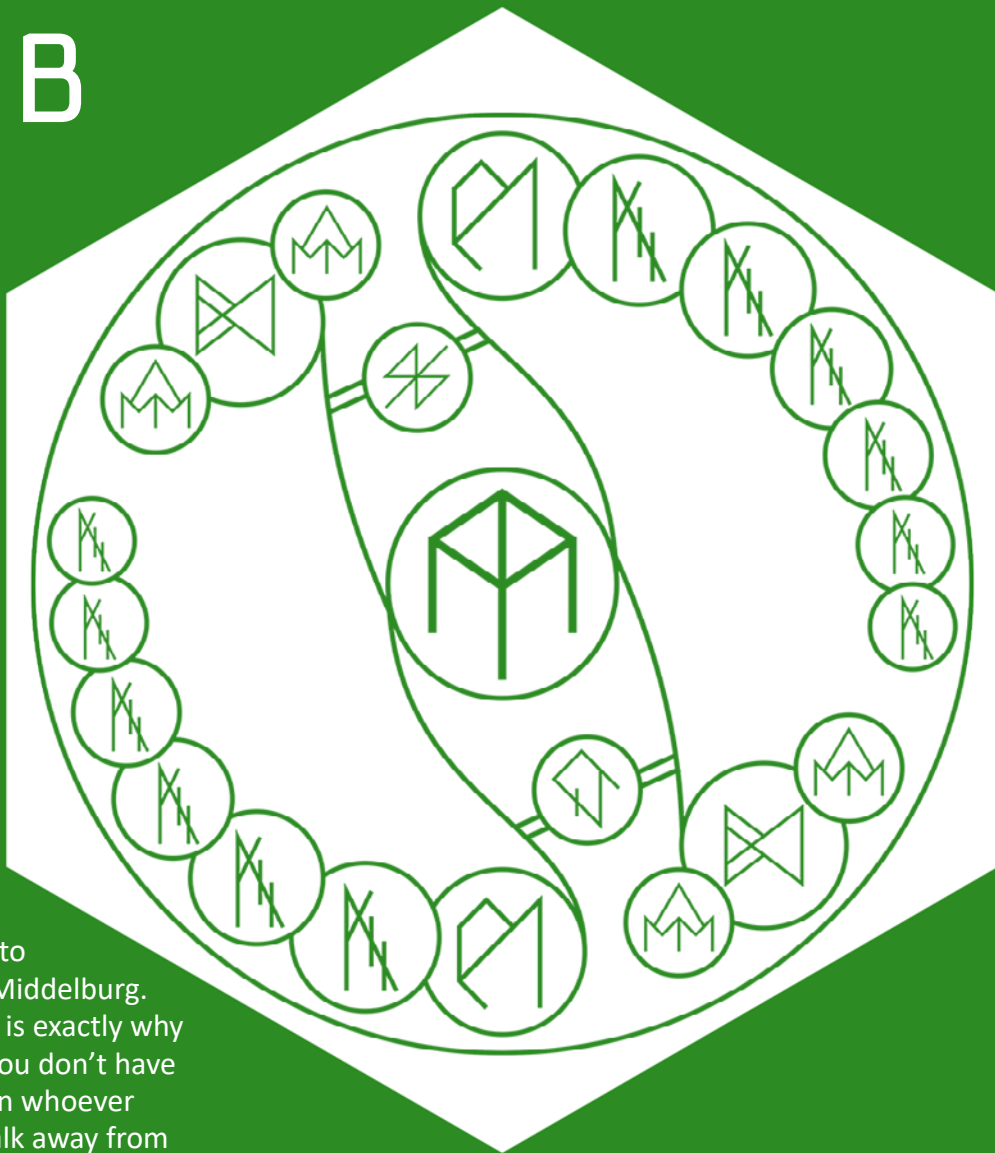
ICE STONE

Transmute Stone to Water if Stone is present and Cool Water at a rate of 16 degrees Celsius per second.
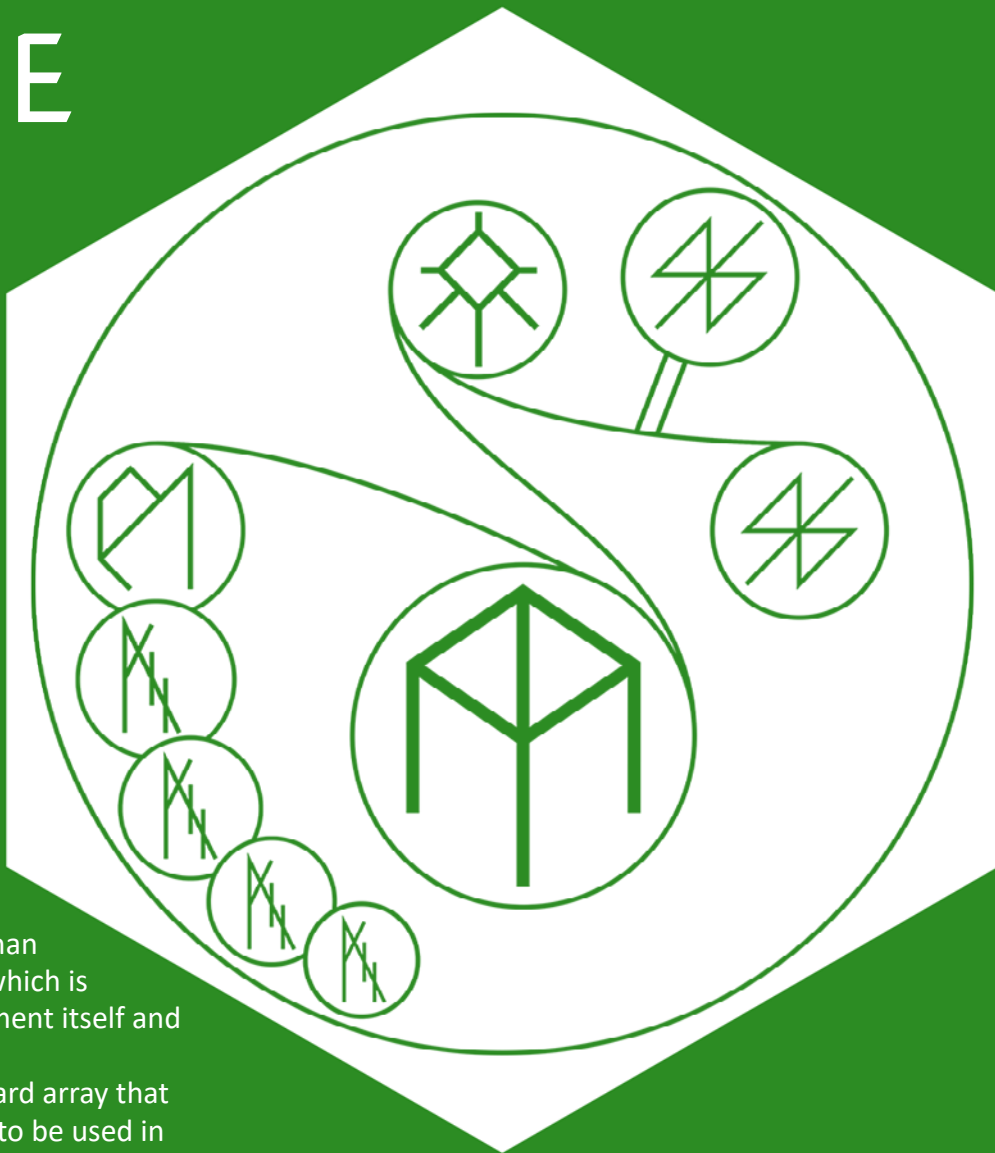
DESCRIPTION

A wise man once said that if you can control the field upon which you fight, then you cannot lose that battle. This is as true whether you are in a pitched battle on open ground during a grand war, or in a dirty back-alley fight in the cramped, darkened alleyways of Middelburg. This because more often than not, it isn't your blade or your firearm which is your greatest weapon, but the environment itself and your ability to manipulate it.

The *Ice Stone* is a fairly straightforward array that exemplifies the runes arrays' capability to be used in a variety of situations. The *Ice Stone* changes stone/earth/soil into water and then freezes that water. You might not think that is anything special, but its the use of this array that makes it so. The *Ice Stone* is meant to be inscribed on small metal balls just like the *Smoke Bomb* and *Sound Bomb* arrays. Because of the If-Then statement in the array, the *Ice Stone* can gather more than enough energy before you throw the metal ball and it releases all of that at once.

While you can throw it at any piece of stone or ground that you like, the purpose of this array is to be thrown under the feet of your opponents. There it will transmute the stone to water, causing your opponent to fall into it, and then it will freeze the water, holding your opponent tightly so he can't move. It's a simple and effective way of getting an opponent out of combat without killing him, or keeping an opponent stationary so that a sharpshooter can get a better aim at him. You can even throw a bunch of these at once towards a group of people to instantly make sure they no longer trouble you.

Sometimes the best way to defeat your opponent is not to attack him directly.

IMPERIAL ZEPHYR

NOTATION

Transmute Copper, Cold, Iron, Lead, Tin, Silver, Wood, Fire, Stone and Water into Air.
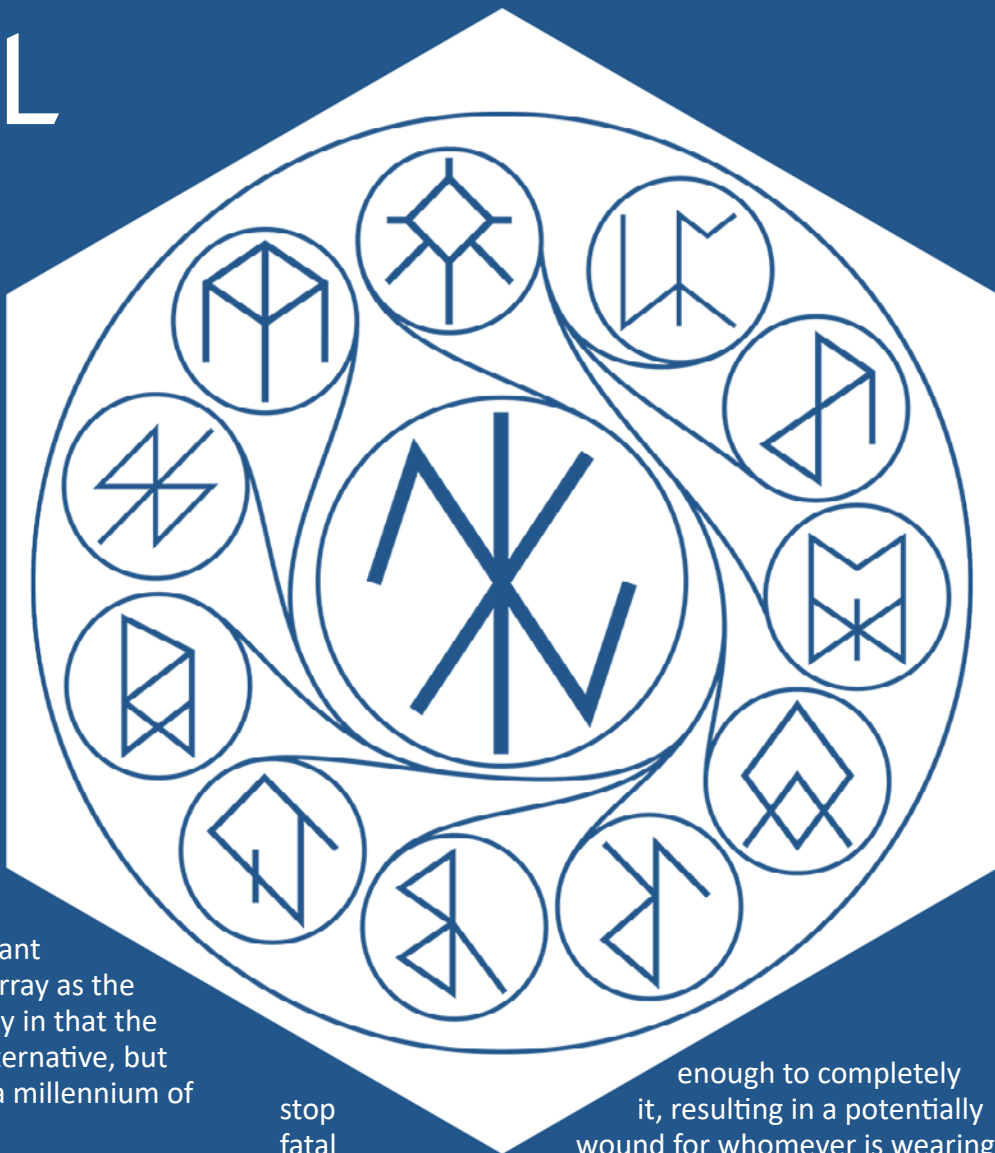
DESCRIPTION

The *Imperial Zephyr* is to the Heavenly Empire of Man as the *Middelburg Standard* is to Alfresia; it is the most widely used defensive array in that nation, so much so that the *Zephyr* is the first array an Imperial will think of when thinks of defensive arrays. Take a *Middelburg Standard* to the Empire and they will all look at you strangely and ask why you would want to change such a proven and effective array as the *Zephyr*. A defensive Alfresian might reply in that the *Standard* is a safer and more reliable alternative, but what would that do against more than a millennium of tradition?

While it is true that in the long run the *Standard* is safer and more reliable than the *Zephyr* to the *Imperials* it becomes a question of energy. As all elementary rune scribes are taught, "A properly draughted array is 100% efficient", but this is only half the equation. This is because an array can only output as much energy as the input it received. Want to create a flame but only can input 1000 Joules of energy? Well then you will only get 1000 Joules worth of fire and not a Joule more.

A containment field steps around this problem because it does not truly exist. A containment field requires no energy at all to be created because it does not in any material sense exist. However, once it comes into contact with a material that it needs to contain or exclude, *then* it requires energy and it requires as much energy as would be needed to hold something in, keep something out, or obliterate something wholesale. In this way, the *Standard* requires no energy to be activated, but does require energy after it has been hit. "Product first, payment second" it could be said.

This can be risky as a containment field already activated, but without enough energy stop, for example, a musket round may deactivate halfway through stopping that round and not activate quickly enough to completely stop it, resulting in a potentially fatal wound for whomever is wearing the *Middelburg Standard*.

This is, the Imperials argue, where the *Zephyr* is a better array. By transmuting whatever hits it, it is a "Payment first, product second" type of array. It requires enough energy to transmute whatever hit it into air before it can activate. This is argued to be the more reliable method as most everything is more dense than air and so it takes less energy to transmute, for example, lead into air as it does air into lead. Theoretically, the Imperials argue, this means the array should never encounter a problem with energy usage.

The Alfresians argue that keeping up a containment barrier before being hit is far safer because the *Zephyr* requires energy input (nearly always in the form of being hit by something) before it can activate. Keep in mind that an array does not absorb energy, it translates it. This means that it creates a copy of the energy for its own use. This means that if something were to hit the *Zephyr*, the array would only transmute the material once it has gained enough energy. However, that energy is kinetic energy that the person wearing the *Zephyr* would feel. A hit too hard, too quickly, could potentially still kill the person even as the *Zephyr* transmutes it.

Who is right? Who is wrong? A question for the ages.

INVISIBLE CHAOS

NOTATION

Rotate Humans at a speed of 4 m/s, within an area starting from 10 times the array's diameter to 190 times the array's diameter, and apply the effect of Air, Sound and Light Transmuted into Lightning to Humans.

DESCRIPTION

The popular image of a footman is one who skulks around in shadows with a dagger and pistol in hand and nothing else save malice and greed. While the first and last images may be more correct than many would want to think, a footman is often far better equipped than with merely a dagger and pistol. Many carry more weapons and equipment on them than what the government provides soldiers, constables and sailors combined.

One specific type of gear a footman usually carries is premade arrays inscribed on metal disks (most often copper or silver). When the lead and steel starts flying, there is never enough time and concentration to draw arrays, so having predrawn arrays can save your life.

This is how the *Invisible Chaos* array is used. Inscribed on 10cm wide disks, they effect an area starting one meter out to nineteen meters out. And when activated, everyone within the area of effect is suddenly, and sometimes violently, swung around the array while the air, light and sound around their skin is transmuted into electricity which will keep them stunned and confused, out of breath, blind and dumb. Seen from the outside, once the array is activated, all that you can see is pitch-black shapes tumbling around the array.

Like the *Riptide* array, this is often an array of last resort, used when you are surrounded by enemies and looking for a way out. However, there are quite a few footmen that have taken to the new *Rotate* rune with glee and many times rush into enemies positions to use this array to quickly, quietly and efficiently take out a guarded position while their criminals in arms make their way in somewhere else.
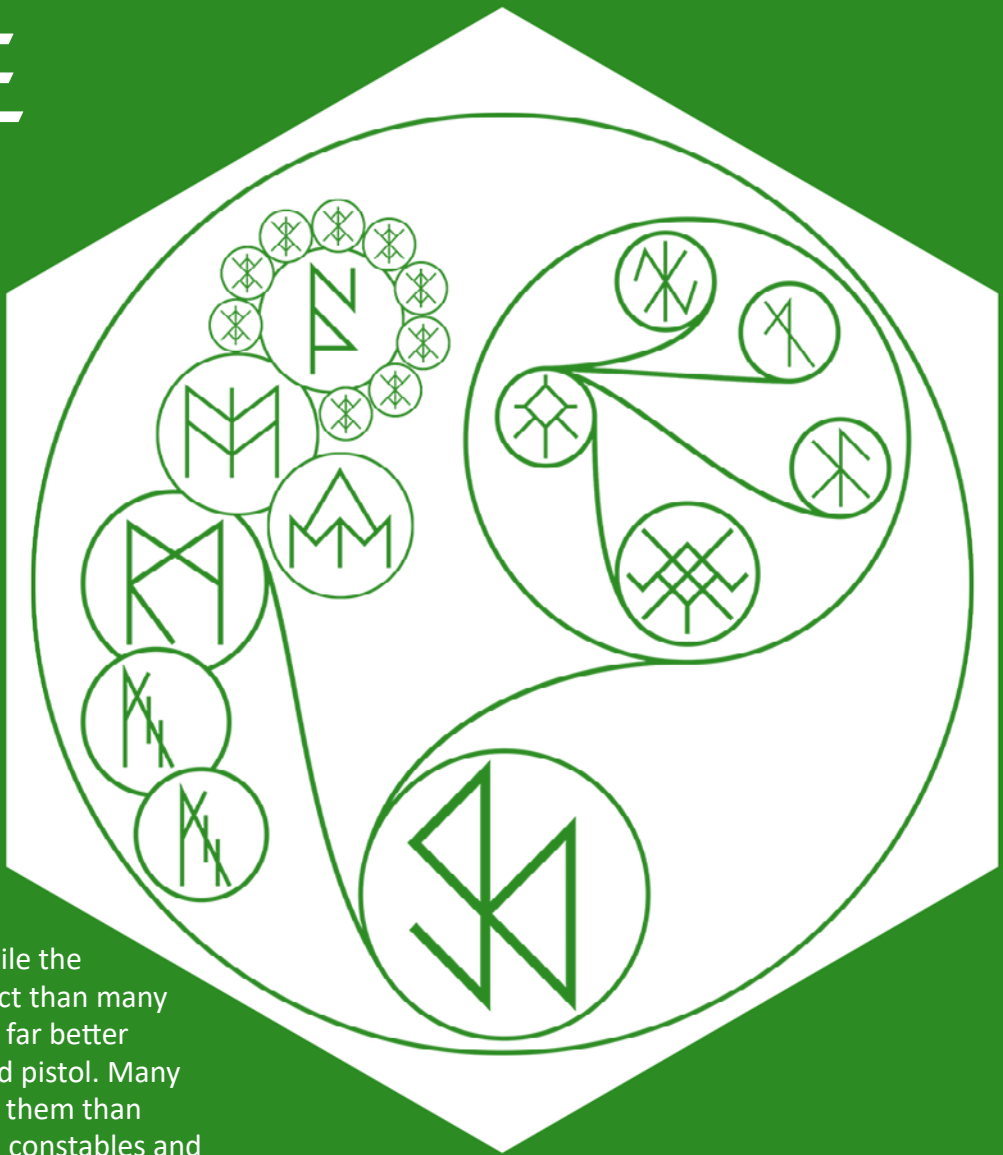
The array have become so effective that some constables have even taken to carrying it around to use when they need to control unruly crowds.

KAÍN'S CANTEEN

Create Water in shape of a disk as wide as the array and 1/10th the array's diameter in height if there is not enough water to fill that space.
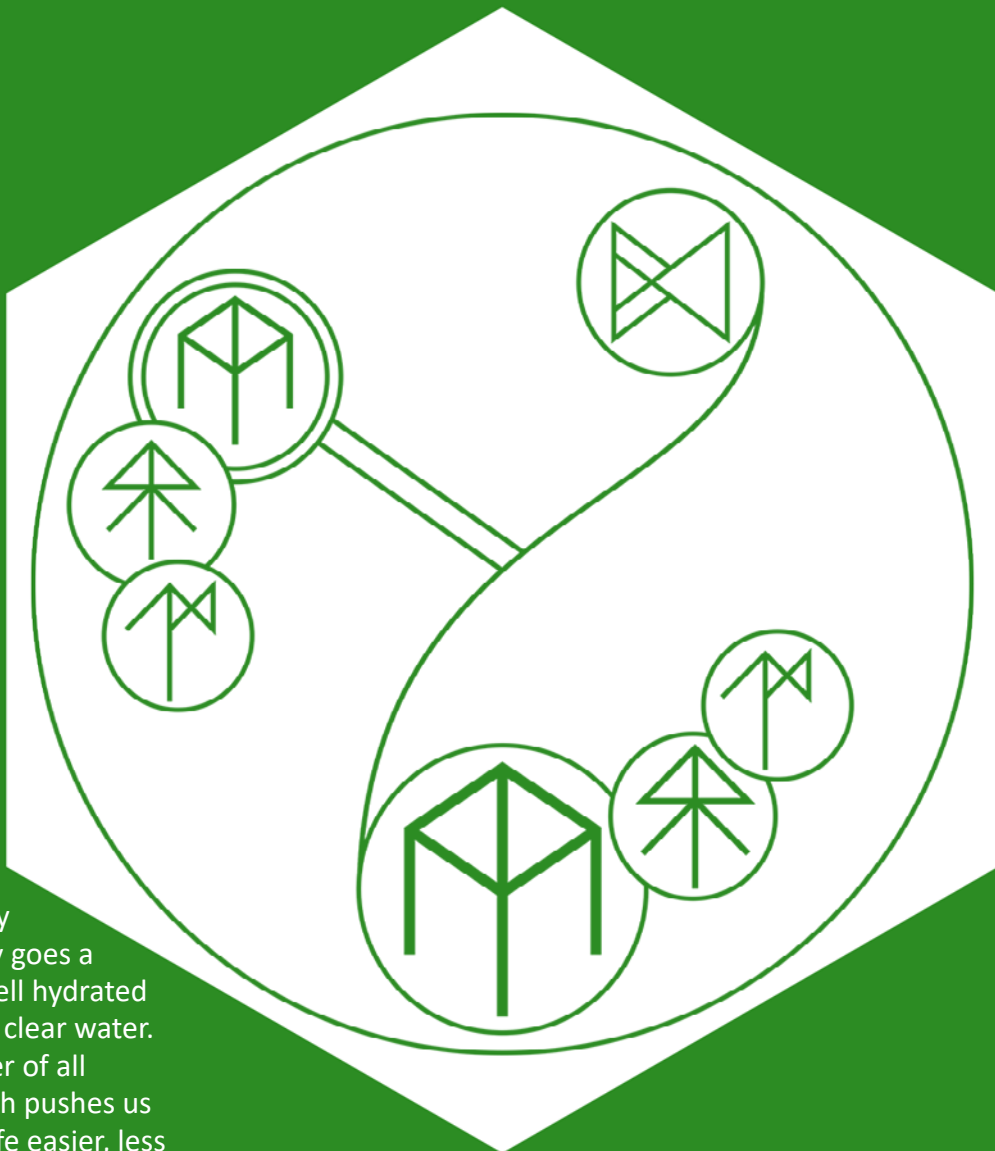
DESCRIPTION

Most often in life it is the simple things in life that matter most, and what is more simple and what matters more than good old water? The world's surface is most made of it as are we and so we need a lot of it quite regularly in order to survive and thrive. This array goes a fair way into ensuring you are always well hydrated and never far from a good cup of clean, clear water.

They say that necessity is the mother of all invention, but in truth it is laziness which pushes us to invent new things in order to make life easier, less complex and less harsh for us. The *Kaín's Canteen* array is a perfect example of it. With the *Water* rune, anyone and everyone has access to as much water as they could want, when they want it. The issue is that drawing an array every time you want a glass of water is tiresome, time consuming and just plain old boring. Yet we do need to drink and we don't want to drink stale, old water.

The Westerners in their hot and harsh deserts came up with an elegant solution, as they so often do. At the bottom of a flask or canteen they would draw this array and then simply go about their business. The heat of the desert and the movement of the canteen would impart energy into the array and create a little bit of water. Every so often all you need to do is invert the canteen (while the lid is on, clearly), and with no water on the array, it would create a stream of water until the canteen has been filled.

Repeat this whenever the canteen runs out of water and there you have your very own decanter of endless water.

While Middelburg is not as hot as the western deserts, the same principle applies and so you will see many constables, soldiers and craftsmen (those professions which keep a man duly occupied and on the move) carrying a canteen with this elegant little array at the bottom. Many footmen are also keen admirers of the array as it gives them a little bit of comfort on long, difficult jobs, especially those that require staking out an area of hours, if not days on end.

LONG SHOT

NOTATION

TOP ARRAY: Create a Containment Field that excludes Air if Air is present.

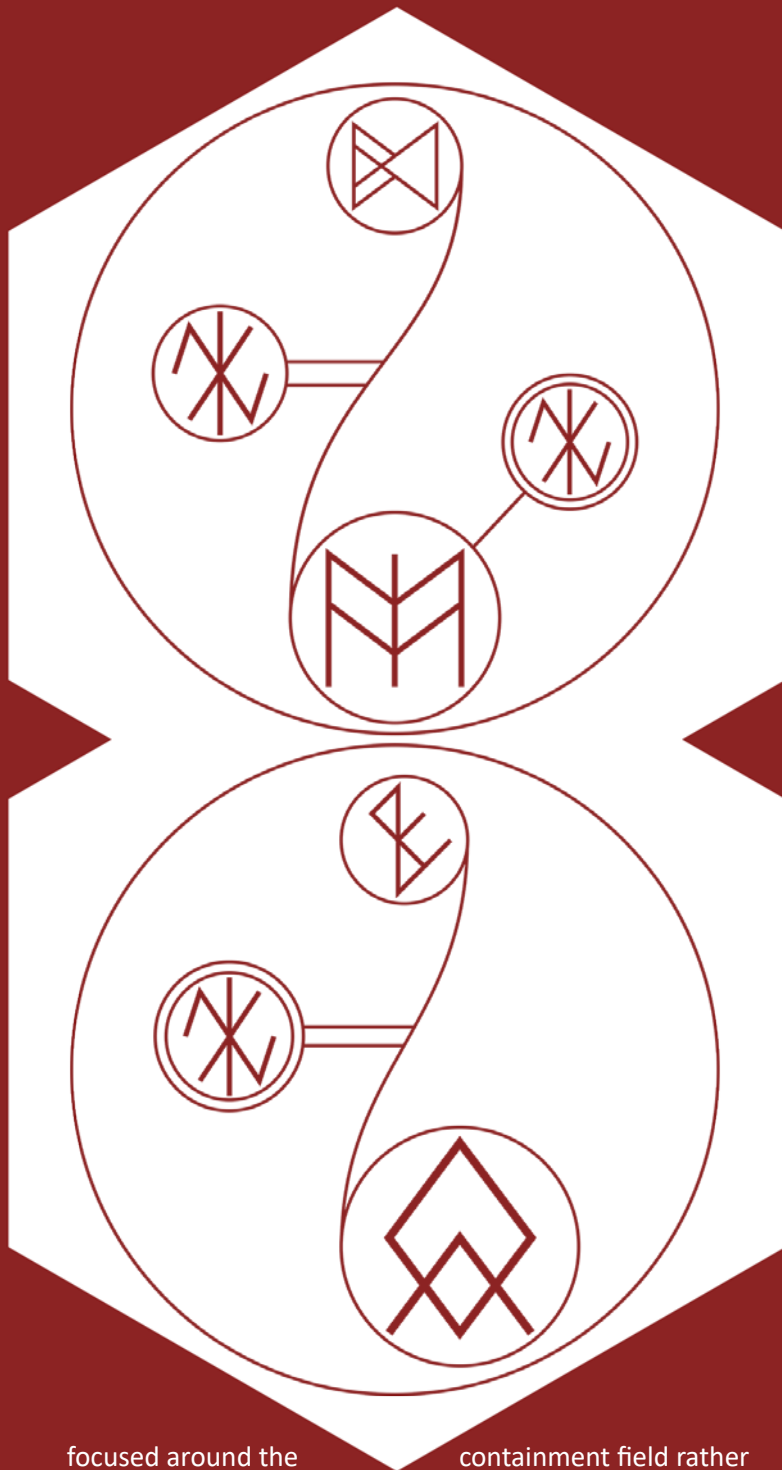BOTTOM ARRAY: Float Lead if Air is not present.

DESCRIPTION

This is one of the few blatantly offensive arrays that use two arrays working together to accomplish one task. This is something more often seen with utility arrays, where one needs a degree of specificity not commonly seen in offensive arrays, but the *Long Shot* does one thing only and it does it very well and for that it needs two arrays.

To understand its purpose and the need for two arrays, one must first understand its intended application. Unlike many other offensive arrays that can be used with musket rounds, arrows, bolts, swords, knives, axes and everything in between, the *Long Shot* was specifically intended only for musket, pistol and, more rarely, cannon rounds and its effectiveness beyond these are little to none.

Now, knowing what these arrays are intended for, along with its quite unsubtle name, it is easy to work out what the *Long Shot* does: it makes firearm rounds travel further and faster. One can argue that this is a immensely mundane use of an offensive array, especially when compared to some of the gruesome and grisly arrays often applied to weapons, however it all comes back to the specificity of why these arrays were designed. The *Long Shot* is mostly used in war where being able to kill the enemy before they can fire back is always a good thing, however it has found its home in the dark streets of Middelburg by snipers who know that every metre they can gain on a shot is worth its weight in orichalcum.

Both arrays work towards its goal of carrying the fired round further. The top array does so by destroying the air around it, lowering the air pressure (and thus wind resistance) around the fired round to near nothing. The bottom array (inscribed backwards onto the round so that the runes face inward) removes the effects of gravity on the round and allows it to float freely in the vacuum caused by the top array.

While it may be simpler for the top array to just create a ever-present containment field that excludes air, rather than making the field only when air is present in order to destroy it, but all this will do is have the wind resistance focused around the containment field rather than the round. It won't get rid of the air resistance. By putting in the If-Then statement, the array destroys the air before it reaches the round, creating a near vacuum.

The reason why the bottom array only *Floats* the round when no air is present is the same as with any array with an If-Then statement: so that the array can store energy before being shot.

Eventually both arrays will run out of energy and the fired round will succumb to air and gravity and fall to the ground, but with the *Long Shot* a round can easily travel twice as far as normal.

MIRROR SHOT

Transmute Copper, Gold, Iron, Lead, Silver, Tin and Wood into Iron of a size 100 times smaller than the array and Push that Iron at a speed of 256 m/s.

DESCRIPTION

Whomever first spoke the idiom "offence is the best defence" must have been thinking of the *Mirror Shot* array when he spoke those immortal words. The *Mirror Shot* array is a transmutative defensive array that draws from the same base model as the *Flame Ward, Armour of Light* and *The Prophet's Blood* arrays but instead of transmuting whatever material hits it into fire, light and water (respectively), the *Mirror Shot* transmutes these materials into a tiny piece of iron that is violently pushed away from the array at a quarter the speed of sound. In effect, the *Mirror Shot* is a gun-shield.

While the workings of the array is fairly simple, its application is always more complex. This array has always been intended to be solely used on a shield, or other sturdy, strong and flat object. Not only because a shield gives a good and uniform coverage of your body, but also because firearms have recoil. As anyone who has handled a firearm will tell you, they all kick; some like a mule, others like a toddler, but kicking is what firearms do… other than kill things. Placing this array on your clothing, especially on your arms, is a sure fire way to have your limbs buck and jump seemingly of their own accord when you least want them to. It's far better to have the recoil dissipate through the broad surface of the shield and the arms strapped securely to it than having your wrist snapped.

For those who prowls the streets of Middelburg committing nefarious deeds, they will be pleased to hear that the *Mirror Shot* array has found its home on the streets. While it was first designed for military use, urban combat is a much more natural fit for it. There are many reasons for this, but the most important one is that you can't quite aim this array. It is on a shield, which is hard enough to aim as it is, and you

never know when a blow or strike is coming, meaning you can "shoot" off a "round" without realising it. Extremely hazardous in combat when you are surrounded by your allies, but amazing in the narrow streets and alleyways of Middelburg, where a ricochet is as dangerous a well aimed shot. The other reason is that this array is as suited to ranged combat as it is melee. The benefits of a shield that can shoot an opponent a metre away from you is self-evident, but by pushing the tiny piece of iron at a quarter the speed of sound, this array can shoot a sniper as easily as he can shoot you.

MOMENT IN TIME

NOTATION

Increase the speed of Time by 16, Contain it the circumference of the array, and Slow Time by 16 at the circumference of the array.

DESCRIPTION

A bubble in time. A moment of it captured, stretched and protected from the rest of the universe. This array can do only one thing and that is give you a little extra time while making sure you aren't disturbed. For two lovers wishing that a moment, an hour or even a night would last forever, this is definitely the array for them. For students needing an extra moment to study, or warriors needing to catch their breath while planning their next attack, this array also works remarkably well. However, we'll focus on the lighter side of life here.

This array gives you more time in a simple and easy to understand manner, it simply speeds up time within the array by 16, meaning that one hour outside the array means 16 hours inside it. If you only have 5 minutes to spare for a quick kiss and a hug with your better half, with this array you could make it a cuddle too.

Speeding time up inside the array is straightforward enough, but by slowing down time by an equal amount around the edges of the array exploits a rule of physics that should keep anyone inside fairly free of distractions.

As time is sped up by 16 times inside the array and slowed by 16 times at the array's edge, this means there is a disparity at the edge of 32 times normal speed. Anything coming from the outside is first slowed down by 16 times and then suddenly sped up by 32 times. This is where things get stretched and compressed.

Imagine a bullet travelling through the array. First it must be slowed down, but as the tip of it slows down as it enters the edge of the array, its rear is still travelling at the same speed. This will scrunch up the bullet as if it is hitting a near solid object. Then once
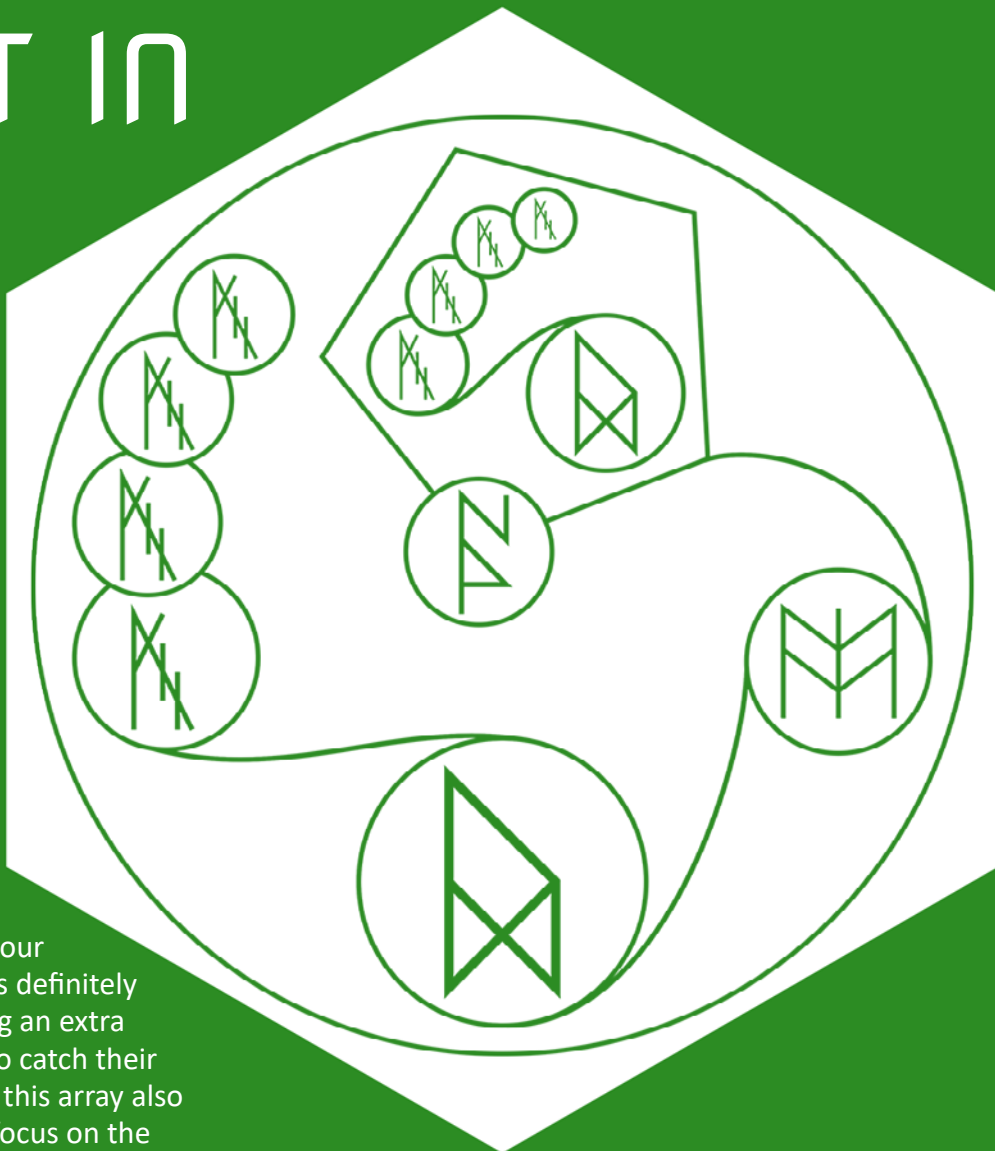
it is through this ordeal, it is sped up 32 times and so it will be stretched as if it is soft taffy being pulled by a machine. Now imagine the same happening to light and sound.

Sound and light when sped up (in wavelength that is, since both are constants) increase in frequency. While inside, you will hear everything outside as shrill shrieks lasting a fraction of a second, not to mention a tad mangled since it had to be slowed down so abruptly first. The same happens with light. While inside, the entire colour spectrum will shift to the red side of the spectrum, meaning blues will look green, greens could look orange and you will even start to see ultraviolet light. It will be an absolute riot of colour that will make everything outside look (and sound) nearly incomprehensible.

But that is entirely the point. When inside this *Moment in Time*, you want to exclude yourself from the real world, and what better way than to make the real world appear so alien and strange that it might well be another universe.

MOONLIGHT CANDLE

NOTATION

Create a Sphere of Light as wide across the array and Push this sphere at a speed of 1 m/s to a height equal to the width of the array. Cast from the Right Hand.

INCANTATION

Behg Ob Jôcht Ant Bol Ant Gerittel Cob Dün Môk Non Ob Ydruch Ant Rônde Ant Grot Cob Ent Fin Regahnd

DESCRIPTION

Every mage needs a spell to light his way, a magical candle to read his magical tomes by, a parlour trick to scare off the peasants. The *Moonlight Candle* does exactly this. It is a very simple spell that does a very simple task: it creates a small ball of light. How it does this is a bit more complex.

The *Light* rune creates 1 lumen of light per cm3 so to know how much light is created, you first have to know how large a sphere you are creating. Since this spell originates from the right hand (and it is easily enough changed to originate from the left hand), you first have to know how large your hand is.

The average adult palm is roughly 8cm across. So with a simple bit of maths to work out the volume of a sphere, we know that a sphere of light as large as the palm of a hand would have a volume of 268cm3, which translates neatly into 268 lumens. This is roughly equivalent to a 30 Watt incandescent light bulb. So it's not the strongest light in the world, but since it will be coming from the palm of your hand, you don't want to blind yourself with it. It's just strong enough to see by and to light your way.

The other somewhat complicated part of the array is the *Push-Circle-Large* part. Remember that the *Circle* rune creates a disk as deep as a tenth of the array's width and any size rune modifying it increases its depth, not its width. This means that the *Large* rune modifying it makes its depth as wide across as the array's width. The size rune turned the disk into a cylinder. By then modifying the *Push* rune with these,
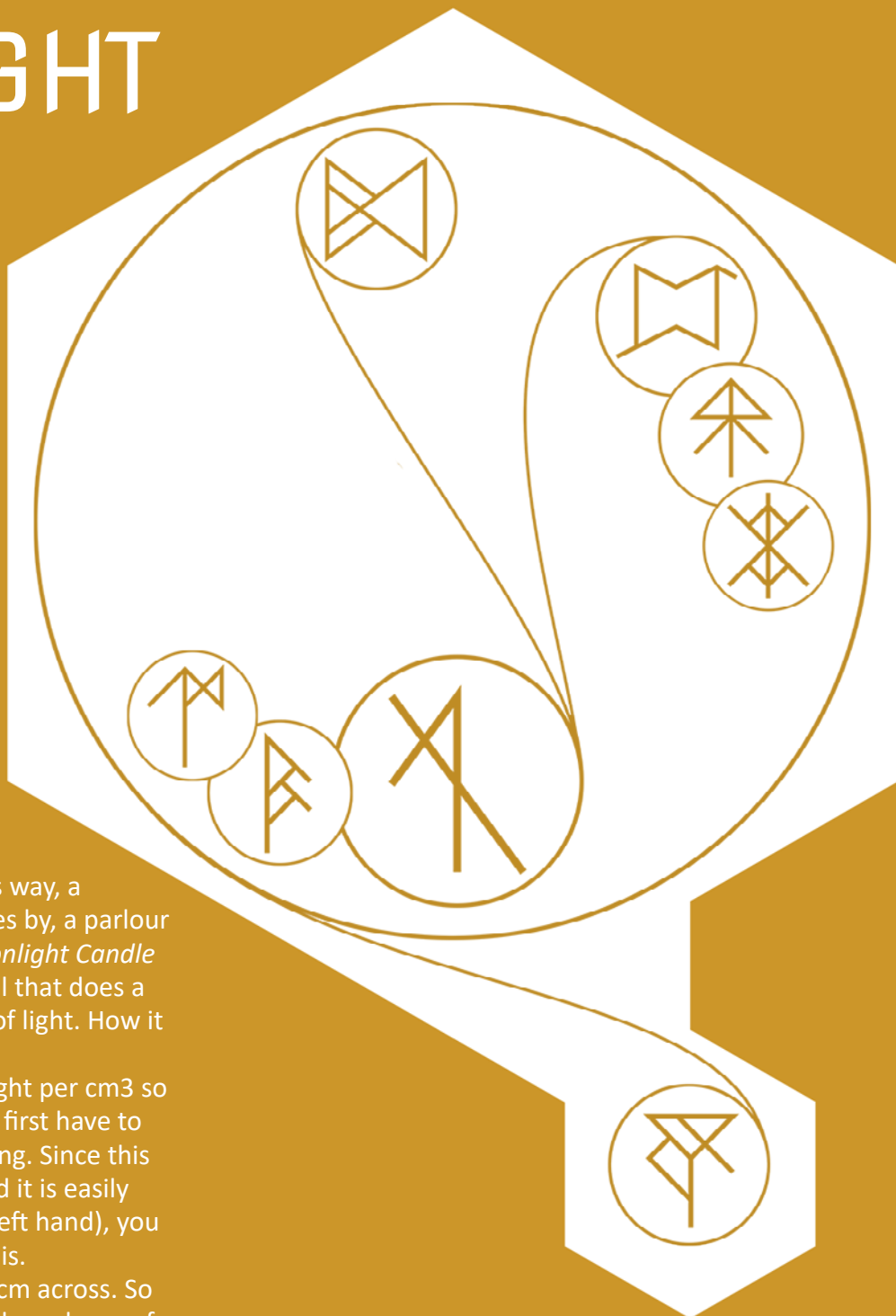
what you are telling the array to do is push the sphere of light up to the boundary set by the *Circle-Large* runes. So this means the sphere of light will only be pushed up to the width of your hand and no further. In effect, it has created a floating ball of light.

POCKET STAFF

NOTATION

Create, if no Iron is present, Wood in the shape of a pillar with a diameter equal to the array's and with a length 30 times the array's diameter.

DESCRIPTION

This is a very simple array that just creates a rod of wood if there is no iron present. Simply, easy, straightforward… and utterly useless unless you know how it is to be used. Like most arrays, the ingenuity in the design of the array is only expressed once you marry the magic to the machine. Arrays are powerful, yes, but with the simplest of technologies they become something special.

Runists are rarely creative and imaginative people and the name of an array always points towards its intended use. "*Pocket Staff*" then should tell you plenty. Clearly, the array creates the staff, but where does the pocket come into the equation? Well from a pocket watch of course!

In the *Runed Age*, this array first gained fame in Middelburg shortly after the grand old clocks were reduced down to small watches on chains that a gentleman could keep in his pocket. So not too long ago. Of course, being a gentleman with enough money to buy and maintain a pocket watch, he would go to soirées and parties and get-togethers with other like minded and wealthy individuals… who always have enemies. Unfortunately, getting a weapon into of these elegant occasions were more difficult than robbing a bank.

Well, almost.

Pocket watches have always been allowed, because they are such a status symbol. While a poor assassin cannot afford a true pocket watch, the outer casing is simple enough for a common smith with time on his hands to reproduce. Inside this empty steel shell would be the *Pocket Staff* array. Once inside the soirée, the assassin had merely to open the faux-watch's casing and out would pop a wooden staff ready to be used as a weapon and even easier to dispose of.
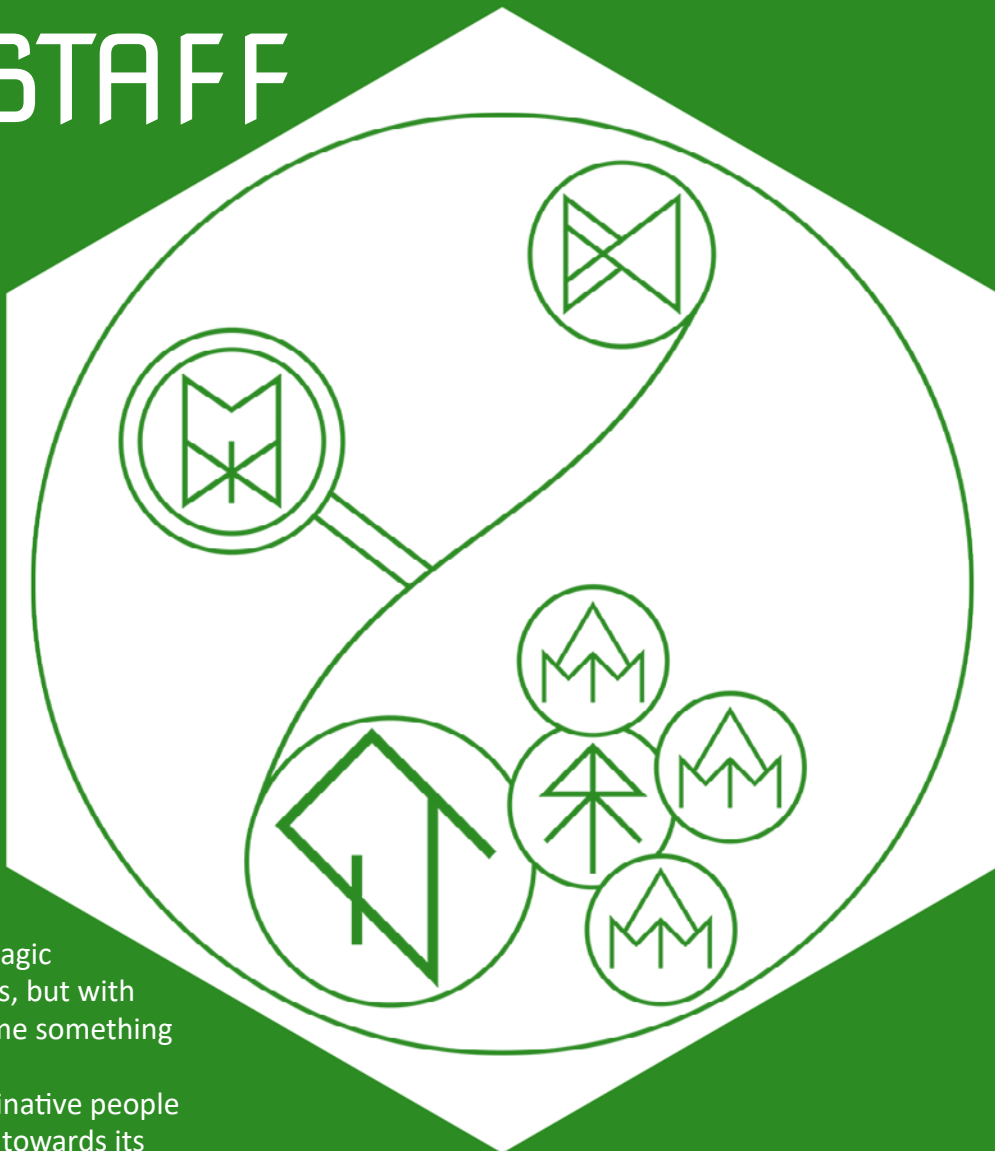
While the household guards have long since started inspecting pocket watches, this array and the faux-watch casing it resides in have found some traction among the footmen of Middelburg who find it an easy and accessible weapon to be used in ambush or as a last resort. At the very least, no one will know your pocket watch isn't real and it does look darn fashionable.

QUIET PEACE

Stop Time within an area 100 times that of the array's circumference and exclude from this effect Humans, Air, Sound and Light.

DESCRIPTION

Bad things happen. That is a simply a fact. Bad things happen and most often there is very little we can do about it. What we can do however, is to stoically accept this fact of life and then try and fix the problem, right the wrong, and set back on course that which went astray. Crying never solved anything, action did, and that is what the *Quiet Peace* array is all about: fixing mistakes.

The *Quiet Peace* array does one thing and one thing only: it stops time. However, this alone does not solve a problem, it merely delays it. And a problem delayed is not a problem averted. So to help fix the problem, this arrays ensures that four things are not frozen in time: humans, air, light and sound. You might think that with humans not frozen in time, this array has very little affect. You would be wrong. By freezing their armour, their clothing, their weapons and everything else they might be carrying on them, every person caught within the bounds of this array's effects are kept prisoner by these very things. By stopping time for their clothes, these cloths cannot be moved and thus are as inflexible as steel... until time reasserts itself and then every movement done to the objects within this array's field of effect happens all at once.

So now we know this array keeps people prisoner, but allows them to see, hear, speak and breathe. For what purpose? To talk things over. That is the heart of this array's purpose: to talk about things before someone gets too badly hurt. Not everyone battle and conflict you will find yourself in Middelburg has someone to blame. Sometimes bad things just happen to everyone involved, and once everyone agrees they would rather not die, they can all go home for dinner... once the array has run out of energy and released them of course.
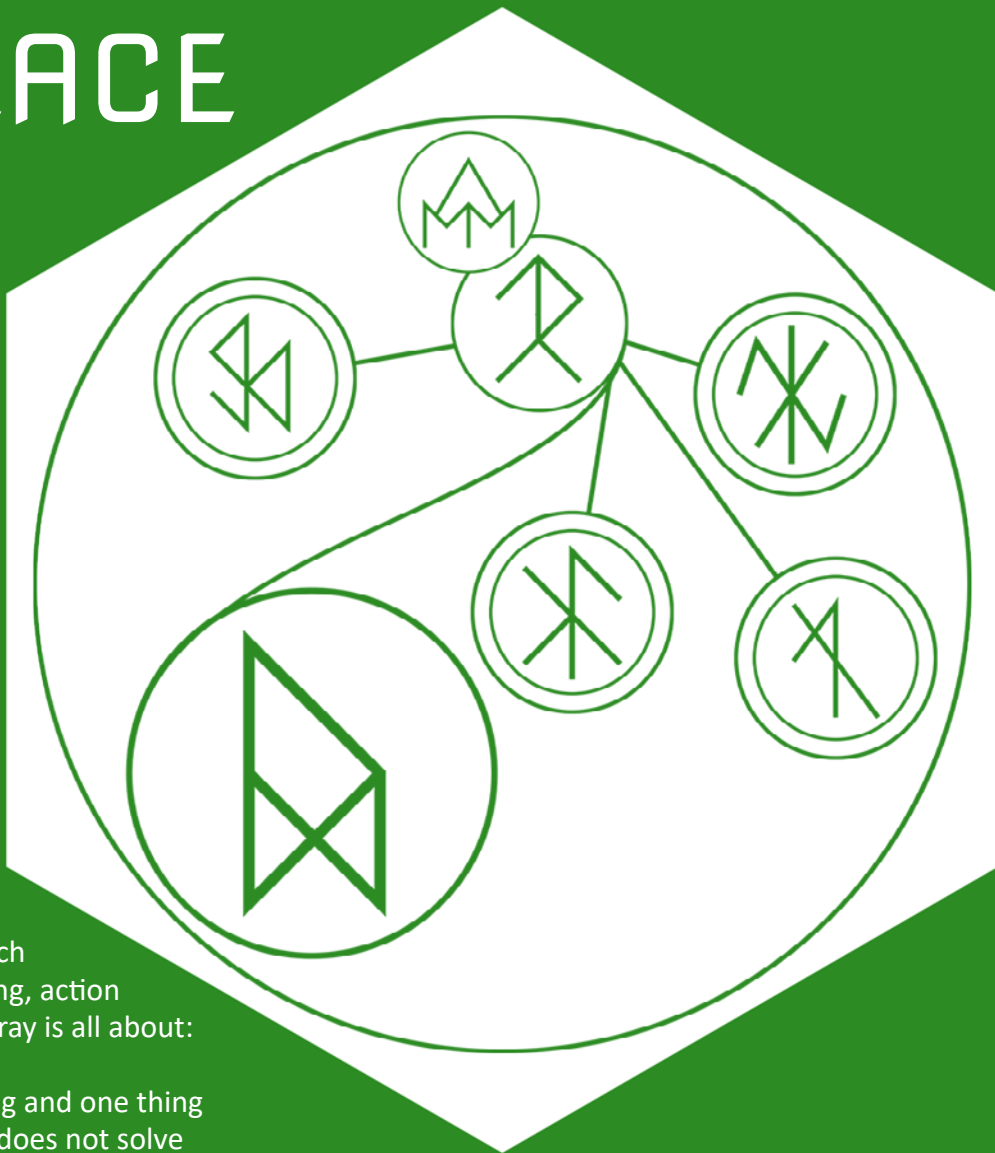
REMOTE TRAP

NOTATION

TOP ARRAY: Create Sulphur if a Human is present within the array's field of effect and Send that Sulphur.

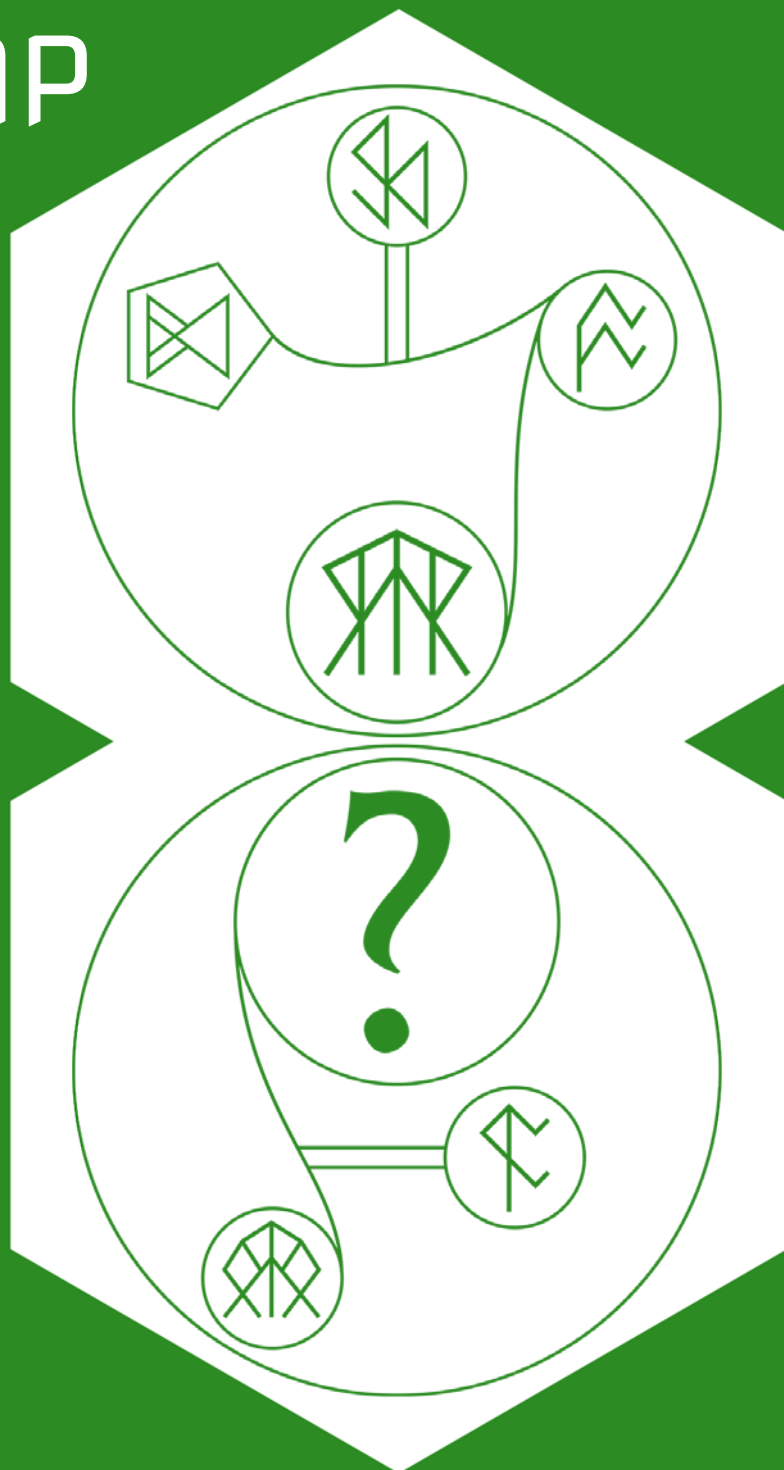BOTTOM ARRAY: Receive the Sulphur if Antimony is present and use it in the MAIN ARRAY.

DESCRIPTION

As you can hopefully see, this array is not complete; the most crucial part is missing. That is because this is not an array *per se*, but a mod for an array. Every single array that has ever been designed and created can be modified in an infinite number of ways, and this is merely a simple way of modifying most arrays into becoming remote activated traps. That's correct, whether it's a *Walking Bomb* or a *Splinter* array, you can slot any array into the big **Question Mark** on the *Remote Trap* and it will instantly become a remotely activated trap. You can even turn non-offensive arrays like the *Star Flare* or *Angel Wings* into remotely activated arrays.

Of course, things aren't always quite so simple. First off, remember that this is a remote activated array, so if a human walks over the top array at Location A, then the array at Location B will activate. Clearly, if you just want to attack the human at Location A, you would just use an ordinary trap array. This is more for the bait-and-switch type plans or for advanced warnings of enemy actions. Remember, of course, that you can switch out the *Human* rune that triggers the top array for any rune that would be more appropriate to the situation. If you know a horse-drawn carriage will approach, you can use an *Animal* or *Wood* rune to trigger the array.

Also note how the *Remote Trap* uses sulphur and antimony, both substances which are fairly rare in any given situation. This is because you don't want to accidentally trigger the receive array into creating your trap/utility array's effects prematurely. Again, these runes can be switched for others, but keep in mind to use materials and substances rare to the situation you find yourself in.

Lastly, the sulphur that the bottom array receives must be used in some form or fashion, even if only as an If-Then trigger, so modify your Main Array appropriately. You can of course also transmute this sulphur into whatever it is your Main Array is doing and it will save you some energy.

RESTING HELPER

Push Stone at a speed of 0.5m/s to a height 10 times the array's circumference if Stone is present within an area 10 times the array's circumference.

DESCRIPTION

In the gun twirling, swashbuckling city of Middelburg, very few people take the time to relax, calm down and actually aim. Of these stoic folk who can take their time when bullets and blades are flying around, even fewer take advantage of the runes and arrays to help them with their aim. These rare, legendary type of people are those that nearly always walk away from a battle with all their limbs intact, because they know that it is not the amount of bullets you shoot at your enemy that counts, but rather the amount that hit. And if you only need to shoot one bullet, why on earth would you ever want to shoot more?

The *Resting Helper* does exactly what its name implies: it helps to rest your weapon so that you can take aim from a steady vantage point. Rather than trying to use a cumbersome monopod or bipod to steady your firearm, you can use this array which is not only more convenient when carrying around your musket, but also allows for a better range of movement.

The array works by slowly pushing off a stone surface up to a specified height. If the array is only 2cm across, fairly standard for a musket barrel, then it will only lift the weapon 20cm above the stone, ever so slowly. The slow speed at which it works is paramount to its effectiveness because it allows you to push down against that force, so if you need to reposition the barrel, you can and after you have done so the array will lift the weapon again to its specified height. This allows a musket a greater range of movement and gives a sniper a greater firing arc without sacrificing accuracy.

In **The Runed Age RPG**, you can spend a Sigil to gain a +25 bonus or a reroll on any Skill Check where your arrays are helping you. This is where the *Resting*
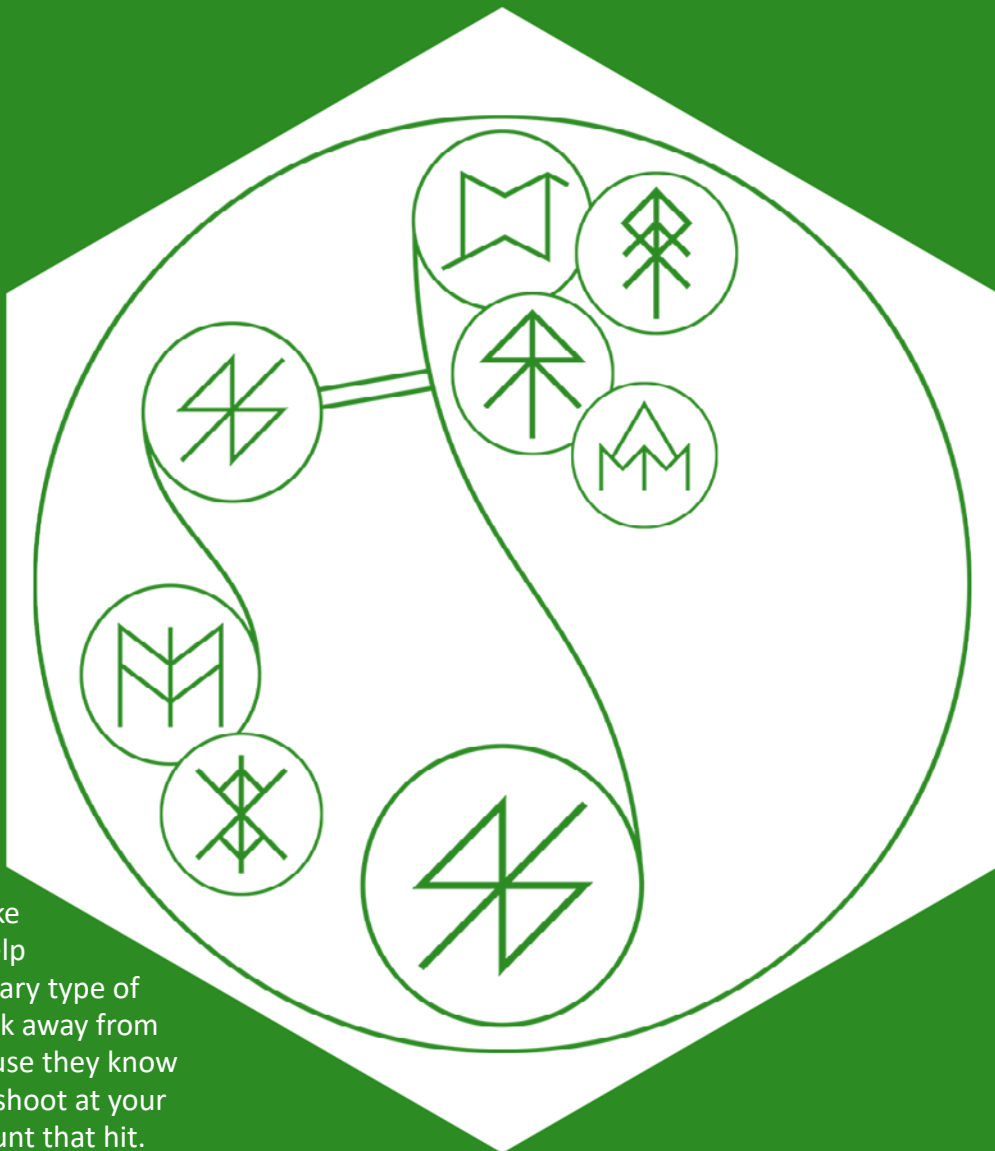
Helper truly comes into its own. It helps you aim, thus when you do aim, you can spend a Sigil to gain a +25 bonus to your Shoot Skill Check as well as gaining the Aiming Bonus Modifier (half your Shoot Skill Level). So if you only have a Shoot Skill Level of 40, this means that you will gain a +45 bonus to your Skill Check, giving you an 85% success rate on any Challenging Task.

Now that is something you can take to the bank.

RIPTIDE

Float (within an area starting from 10 times the array's diameter to 190 times the array's diameter) Human and Push (within that same area) Human at a speed of 4 m/s, both only if a Human is within the boundary of the array.
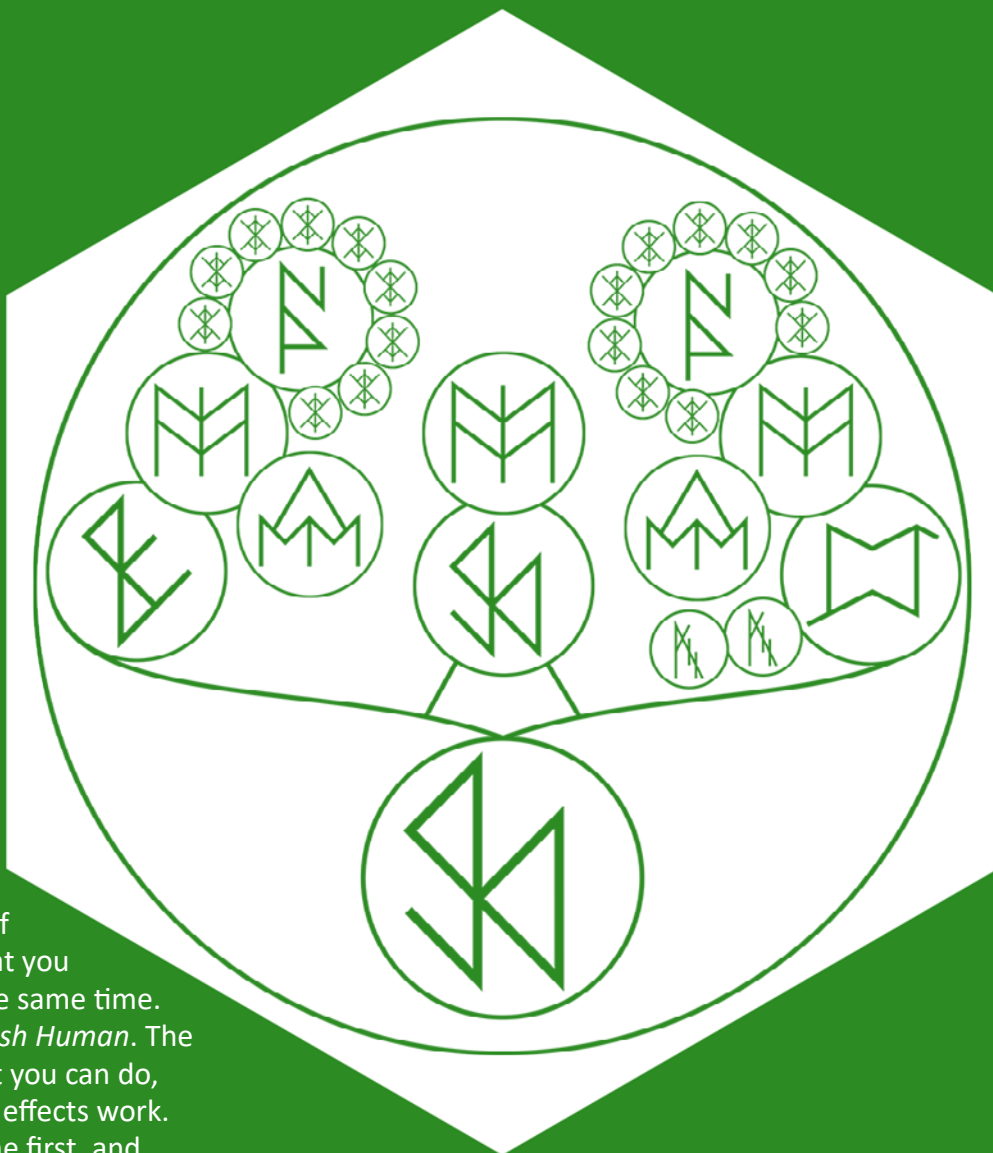
DESCRIPTION

The notation is certainly a mouthful, but that is because it has to work around an inherent limitation of the rules of the runic arrays, namely that you can't affect and not affect a target at the same time. You can't say *Push Human* and *Don't Push Human*. The arrays simply don't work like that. What you can do, however, is limit the space in which the effects work.

There are two ways of doing this. The first, and easiest, is to just use an exclusionary modification to exclude the centre of the array from the effects. The second, and more mechanically complex is to work with the *Shell* rune and work from the outside in to limit the area of effect, and that is precisely what this array does.

In the simplest of terms, if you take away all the added bits and bobs in this array, the *Riptide Floats* and *Pushes Humans*. However, if you want to use this against your enemies in those simple terms, you will be floating and pushing yourself as well, and that defeats the purpose. What you have to do is find a way of having the arrays exclude you from this effect without *Excluding* you from this effect.

That is what this array does. Visualise the size and shape runes in this array as creating a containment field in the shape of a giant doughnut. Inside this doughnut, humans will be pushed and floated, but in the hole in the centre of the doughnut, humans won't be. It is the *Shell* rune which is creating this doughnut by creating a wall at the edge of the containment field. The nine size runes modifying it stretches the thickness of that wall.

Imagine you have this array inscribed on a disk ten centimetres in diameter. That means the invisible doughnut containment field will start at one meter out from the array and go on until it hits the edge of the containment field ten metres out. That one metre diameter circle in the centre, which you should be standing on to activate the array, will be untouched by the effects. Everyone else inside that doughnut will be lifted up and flung outside it, and if they try and get back in all this will only happen again.

Safe to say the *Riptide* is a good array to use in combat when you are surrounded by enemies. It will give you a bit of breathing room and a few seconds of stunned enemies in which to clear your mind and get back in the fight.
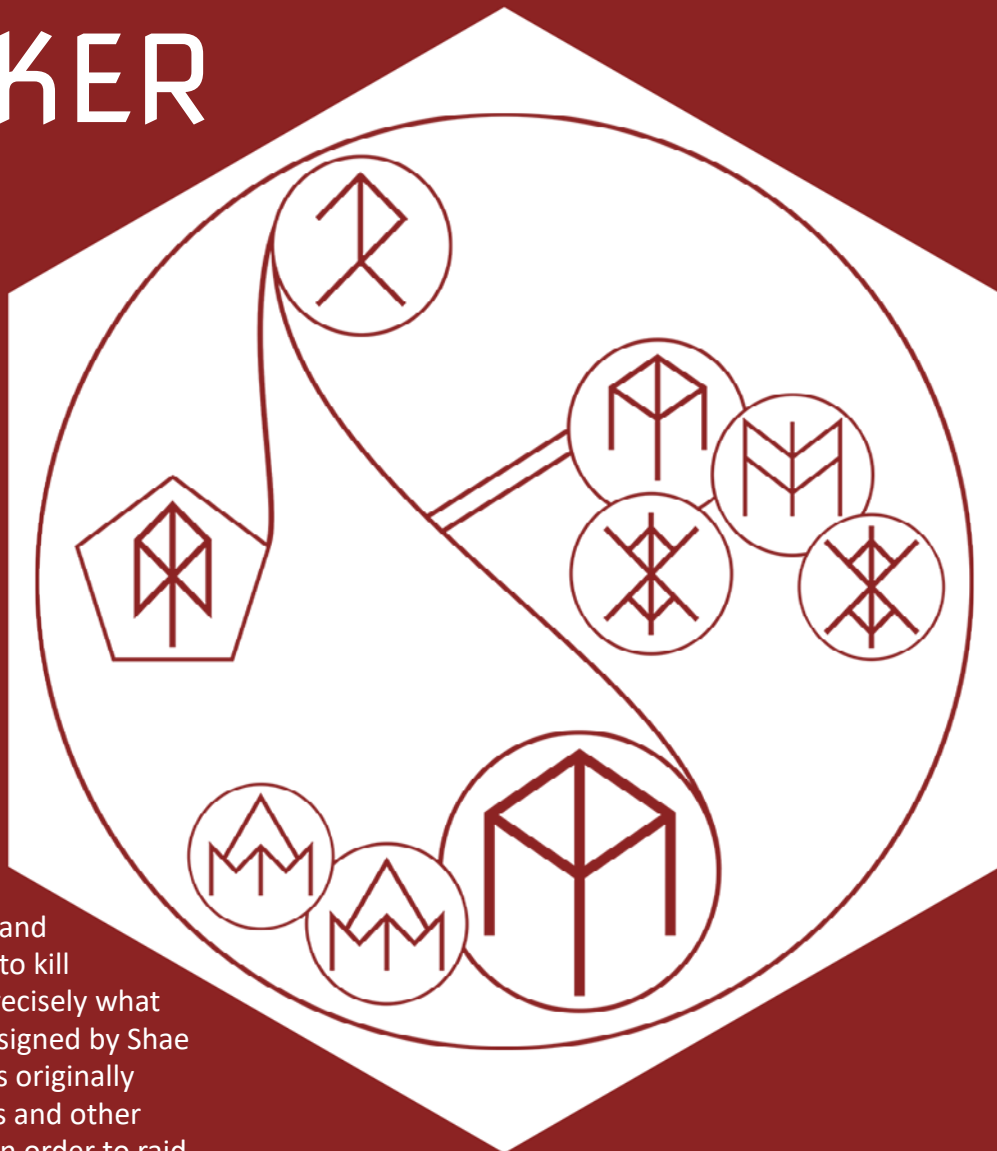
SEAWALKER

NOTATION

Stop Water of a size 10,000 times the area of the array if the array's area of effect is completely filled with Water. Sustain this effect.

DESCRIPTION

To kill two birds with one stone a man often needs either a very large stone or two very small birds, with both options being preferable. However, it seems more likely than not that it comes down to pure chance and godly luck whenever one does manage to kill two birds with one stone. And that is precisely what happened with the *Seawalker* array. Designed by Shae "Seawalker" McGuinness, this array was originally intended only to help pirates, privateers and other naval-ne'er-do-wells board other ships in order to raid and ravage whatever was on board. While it does this admirably, Shae Seawalker's array also accidentally became one of the most well known and often used arrays for damaging enemy ships. Two birds, one stone, and one legendary pirate.

The *Seawalker* does all this simply by stopping time for any water it touches. Since time is now stopped for water, and only water, it becomes more solid than rock and tougher than the hardiest diamond. It is not impervious, however, for as soon as the array's effects wear off, everything that was done to the water (whether it was the boots slapping across it, ships ramming into it, or cannonballs bouncing off it) will have their effects happen instantaneously and simultaneously. That is why stopping time for humans may make it look like your friend is bullet proof, until time starts again and you have an unfortunate mess on your hands.

This time stopping effect is not only grand for creating solid land beneath a pirate's food to run across to an enemy boat, but under the right circumstances, the array can trap and cage entire ships. A regular cannonball is anything from 10cm to 20cm across which means the volume of water stopped by this array can be 100 cubic metres to 200 cubic metres. If a skilled gunner lands that cannonball right next to a ship, it will freeze time for all the water around it, as if the ship was suddenly trapped inside an iceberg. Even if the gunner has had one rum too many that morning, a 100 cm metre time frozen block of water is stronger than any iceberg and less than half as visible. Many a ship had been sunk by accidentally running into these invisible time-icebergs.

You will find plenty of *Seawalker* arrays inscribed cannonballs on every pirate and privateer vessel, yet lately the military have taken a keen interest in this array. They care not for the ability to board enemy vessels, as they prefer to blast them to merry hell instead, but rather they focus on its ability to trap ships, which they have been using far too regularly on fleeing pirate and privateer vessels; far too regularly, that is, for those pirates and privateers.

SECOND WIND

Slow, in an area in the shape of an Inverted Dome 3 times as wide as the array and 10 times as long, Humans if Humans are present.

DESCRIPTION

It seems that for every defensive array that exists, there are twenty or more offensive arrays. There are only so many ways you can stop something harming you, but a near infinite ways you can harm someone else. This array takes an interesting approach to defence, in that it doesn't actually defend you *per se*, but gives you the time needed to defend yourself, or to strike before your opponent's hit lands.

The *Second Wind* works quite simply: it slows the person attacking you, making them move at half normal speed, in the hopes that you can bring a weapon up in time to deflect the blow, or indeed it can give you the time to kill him before he lands his blow. It's the how, rather than the what, that makes this array interesting.

The main focus around which this array works is the affecting rune (*Slow*) rather than the centrum as is the norm. This is because it is the shape of the effect the array creates which is all important. If you simply left out all the size and shape runes, then this array would slow all humans in front of it, with the more energy put into the array making the effect bigger and bigger. Not a bad thing in and of itself, but if you point the array the wrong way it can slow your allies or even part of your own body that is over the area of effect.

So instead, with the help of the *Invert* rune, this creates a dome (with the tip of the dome in the centre of the array) that stretches out away from you. This gives you some room to move around the edges of the array as the area of effect curves away from you towards your enemy. It also allows you to be specific in who you want to target and so if there are a few enemies you (and perhaps some allies) are fighting, you can pinpoint which enemy to target and help the battle speed along.
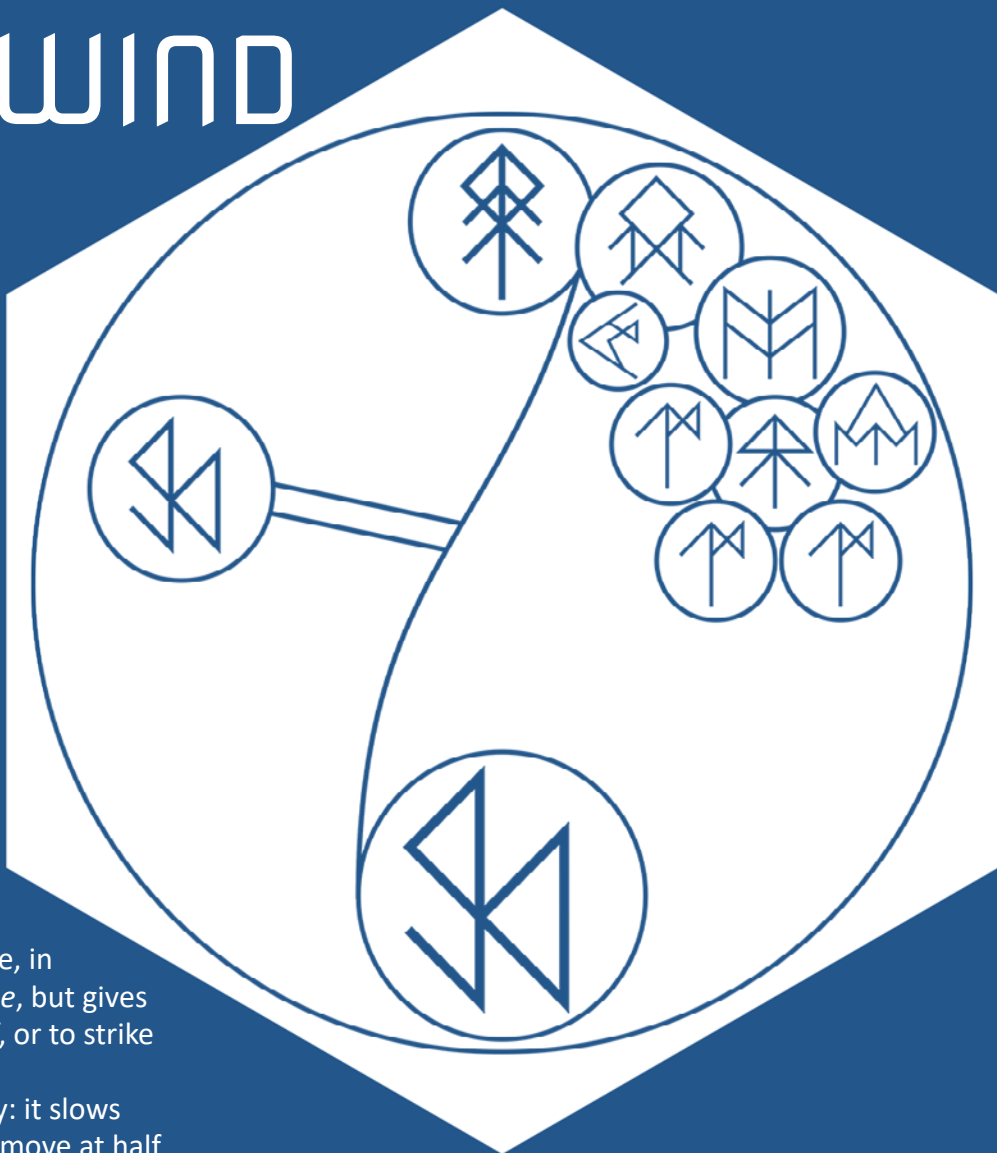
Also take note of how the *Circle* rune works here. Normally it creates a flat disk, and with the size runes attached to it, it would have created a cylinder three times as wide as the array and ten times as long, but because it is attached to the *Contain* rune, it actually stretches the dome to fit into that space. In effect, this conglomeration of size and shape runes creates a round cone with its top on the centrum.

It also should come as no surprise that this array should probably not be put on your clothing and armour as your movement would invariably cause some part of your body to cross the field of the array's effects. Keep this array to shields and bucklers that you can keep away from yourself. Or if you are feeling paranoid, keep this array on your back and you won't have to worry about getting backstabbed anymore.

SHADOW VALLEY

Exclude Light and Sound from all Humans within an area 10 – 100 times larger than the array's size.
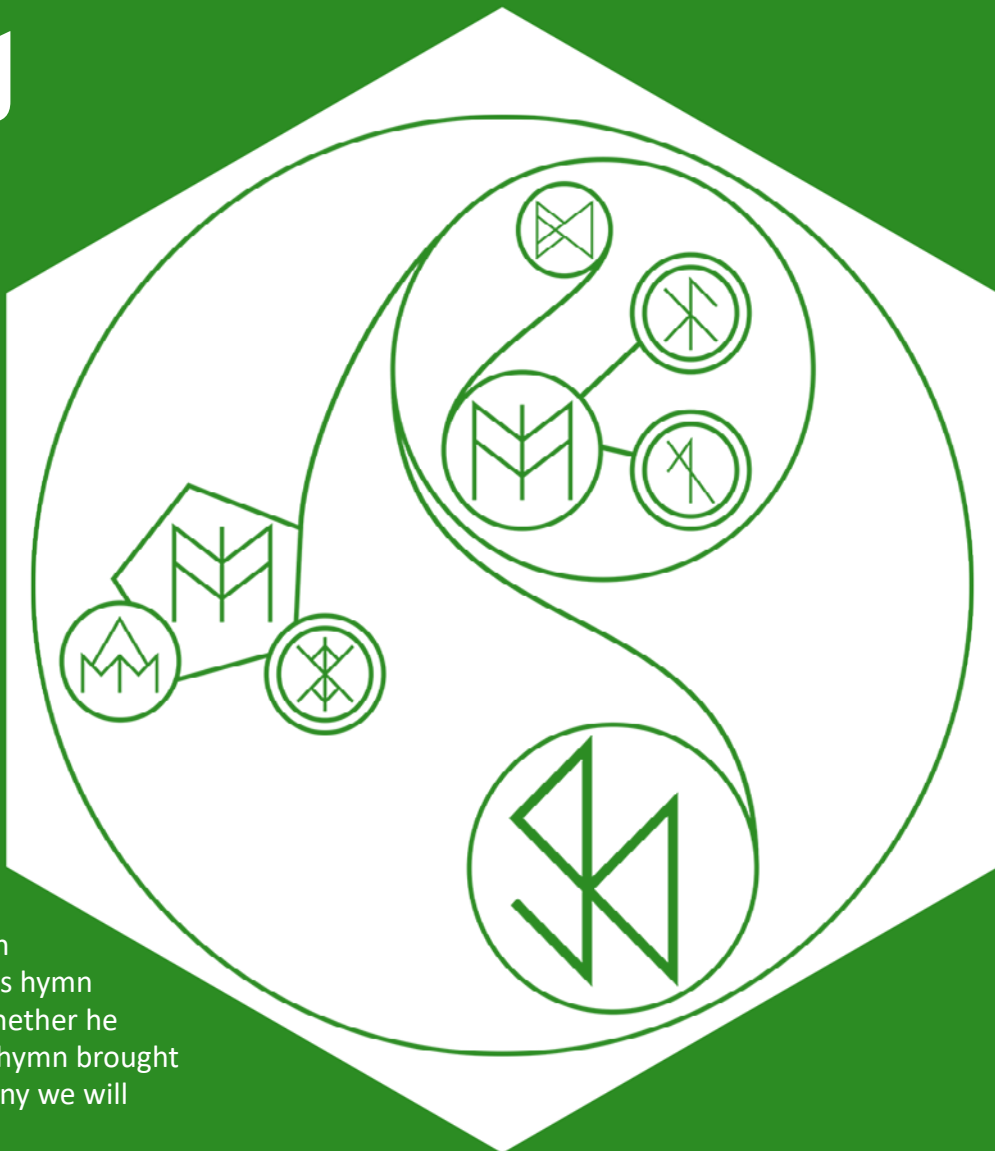
DESCRIPTION

A nomadic tribe in the Western deserts have a sacred hymn that assures them that no matter the trials and tribulations and oppressions, that no matter how dark and shadowed the valley be through which they walk, their god will be with them to comfort and protect them. It seems a footman in Middelburg had been quite taken by this hymn when he created this array, although whether he designed it because of the comfort the hymn brought him or because of sheer sacrilegious irony we will never know.

Just as the hymn says, this array will protect you while you walk through a shadowed valley, surrounded on all sides by confusion and misery... even though that confusion and misery is entirely and utterly your fault. What the *Shadow Valley* does is blind and deafen everyone around you while keeping you immune from the effect. The purpose, of course, is to confuse and disable your opponents while you do what needs to be done.

It does this through two points of runecraft every good runescribe should be aware of. Firstly, by using the secondary array to create the effect of a containment field that excludes light and sound and then applying this entire effect to all humans in range. This means that the containment field is equally applied to all bits of a human that it can reach. This means that every exposed piece of skin will become a focus point for the containment field. Since the containment field excludes light and sound, it means that no light or sound will be able to breach a human's outer layer, effectively blinding, deafening and muting every human in range.

It excludes the person bearing the array by using an "exclusionary modification" on the *Contain* rune, thereby excluding the first 10-times-the-array's-size area from the effect, but since there is a *Gargantuan* rune on the same *Contain* rune, the effect is still spread out to a 100 times the array's size. This is the second way that you can create a doughnut shaped field of effect to spare the bearer of the array the effects of it. The first way is to use a *Shell* rune such as in the *Invisible Chaos* array and modifying its size to what you want. Both methods give the same effect, so it is up the designer to choose what he wants.

Now to how it is put into practice. As with most footman arrays, this array is inscribed upon a disk 10 cm in diameter, meaning the shadow effects start a meter out and ends 10 meters out. However, if you leave it at that, you will only be blinding, muting and deafening everything at and above the level of the array. What you want to do is inscribe this array on both sides of the disk so that no matter where a person is, no matter the altitude, they will be caught up in the array's effects.

And with all of that done, you can safely steal, burgle and murder to your heart's content.

STEEL DRAGON

NOTATION

Transmute Copper, Gold, Iron, Lead, Silver, Tin and Wood into a disk of Iron with twice the area size of the array and with a depth 1/10th that of the array's diameter. Pull this disk towards the array at a speed of 1m/s and Sustain this Pulling.
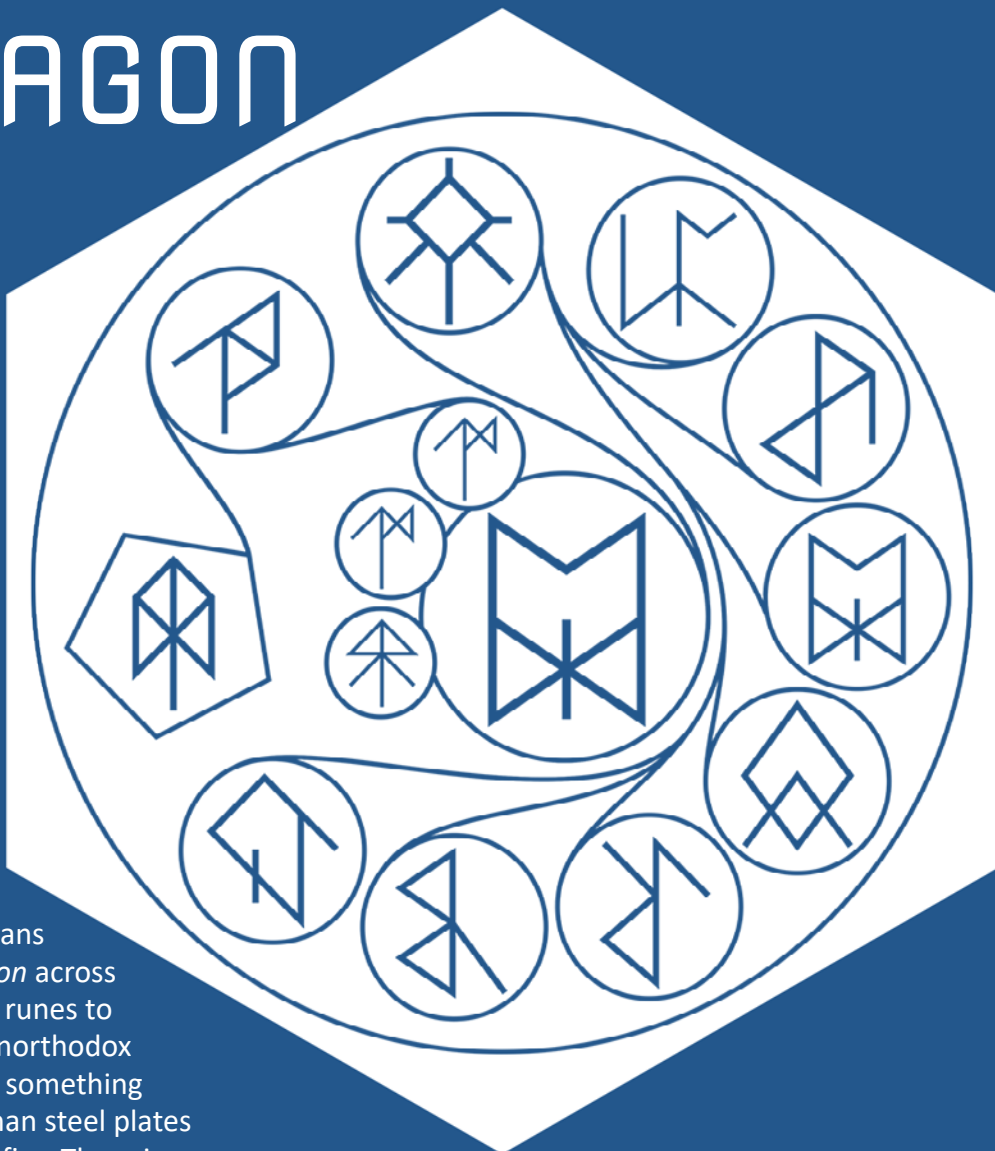
DESCRIPTION

"Protection when you need it, only when you need, every time you need it," was the marketing phrase the Uttosians used when they brought the *Steel Dragon* across the eastern ocean to Alfresia. Using the runes to fashion this type of array was entirely unorthodox according the Alfresians, who preferred something more reliable and rather less tangible than steel plates protecting them from incoming musket fire. There is a reason why the *Middelburg Standard* is the most used defensive array in the city. After all, what can penetrate an impenetrable force field?

"Whatever the arrays do not specify," was the Uttosians answer to that rhetorical question, and suddenly the Alfresians weren't so stalwartly sure about their tried and true array. It is undoubtedly true that the *Middelburg Standard*, as all such arrays do, only stops materials which are specified by the runes in its array. Ice, for example is not specified and that is why, to this day, "ice knives" are (seldom) used in assassinations. What the array makes up for in simplicity, it loses out in flexibility.

"Dragons are as flexible as they are strong!" the Uttosians claimed when they heard of this revelation by the Alfresians, and there is some merit and truth in their propaganda. The *Steel Dragon* does create the steel disks (or Dragon Scales) only when confronted by the materials listed, similarly to the *Middelburg Standard*'s force field it is true, but that scale is then held against the array by any lingering energy, ready to intercept any impact from any sort of material. Once it has been primed, it leaves behind a set of armour ready to defend its wearer.

To increase the flexibility of this array, the Uttosians who venture into Middelburg often carry pouches of gold dust with them. If ever confronted with an enemy, they simply have to reach into their pouch and cover themselves with the dust and like a parlour trick, they will suddenly have become encased in a set of dragon scale armour! There is a reason why the Middelburg footmen call the bodyguards of Uttosian diplomats *Wyrms*, because like the fabled creature they can suddenly appear in flash of golden light to rip apart the unwary.

STINK BOMB

NOTATION

Create Sulphur if Stone is present; Contain the Sulphur; Create the effected of a Sustained Fire and apply this effect to the Sulphur if Stone is present.

DESCRIPTION

This is an array where one's delight in it or one's horror about it all depends where one stands (often quite literally). The *Stink Bomb* array does exactly what it says and it does it supremely well.

This array follows in the footsteps of the other successful *Bomb* arrays where the intention is that they are inscribed upon small metal balls and then hurled wherever and whenever they are needed. As this array only activates when it hits ground or stone, you can safely carry a stink bomb around on you without any fear that you will become affected by its ghastly stench.

The means by which the *Stink Bomb* array creates its titular stench is by the same means that we so dislike rotten eggs, sweaty socks and putrid flatulence: sulphur, specifically in this array's case Sulphur Dioxide. Sulphur Dioxide is created by a variety of means, one of which includes burning elemental sulphur, which is precisely what this array does. The *Stink Bomb* creates both sulphur and a sustained flame and then applies that ever burning flame to the sulphur, keeping it burning and releasing that much needed and much reviled sulphur dioxide.

One thing to note with this array that differentiates it from other *Bomb* arrays is that it contains the sulphur to the array, meaning that as the metal ball on which it is inscribed rolls along a floor, the sulphur will travel with it, near on sticking to the ball. There are two reasons for this. The first is practicality. Had there not been a *Contain* rune, then the array would have created the sulphur and attempted to light it in the exact moment it touched stone. This may not be long enough for the runically created fire to light the sulphur and you might end up with a less than

spectacular stink.

The other reason is safety. At best, this is a distraction array and at worst a practical joke array. You don't want to kill someone with it, but inhaling sulphur dioxide could very well do just that. By keeping the sulphur stuck to the array, eventually the entire array will be covered by sulphur, meaning the array won't be touching stone anymore and thus no more fire and no more sulphur would be created. It's a natural safety mechanism to make sure a joke doesn't get out of hand.

# SWIFT SHINING JUDGEMENT

NOTATION

Transmute Copper, Gold, Iron, Lead, Silver, Tin and Wood into Silver and put on the Silver the effect of Created Lightning.

DESCRIPTION

An illustrious name for a fairly simple defensive array, but seeing as there is a *Lightning* rune in the array it means this array is very, very new in the city of Middelburg and ostentatious names are the flavour of the month. However, credit must be given where it is due and the ostentatious name of this array certainly matches up to its effects. As with most defensive arrays, the *Swift Shining Judgement* transmutes whatever is about to hit you into something that can be used offensively against your attacker. In this specific case, the array transmutes a variety of materials into silver while at the same time creating lightning on that silver. This comes with a few positives and negatives.

The positives is that silver is the most conductive of all metals and so transmuting whatever is hitting you into silver means that it will only take the smallest amount of electricity to shock your opponent enough into either dropping his weapon or even completely incapacitating him. Because of this, there is no reason to put a If-Then trigger in order to build up energy. The force from whatever hits the array should be enough to both transmute the part that is hitting the array and electrify it.

The problems with this method of defence are immediate. This array is meant for hand to hand combat, since you need the array to electrocute whomever is attacking you and that won't work if they are shooting arrows, bolts or rounds at you. The other major issue is that this array simply creates electricity, it does nothing to prevent you getting shocked. So if you want to use this array, put it on something that isn't very conductive, like a wooden shield, or some thick leather armour. As its name implies, its judgement is swift and you don't want to accidentally get electrocuted by your own array.
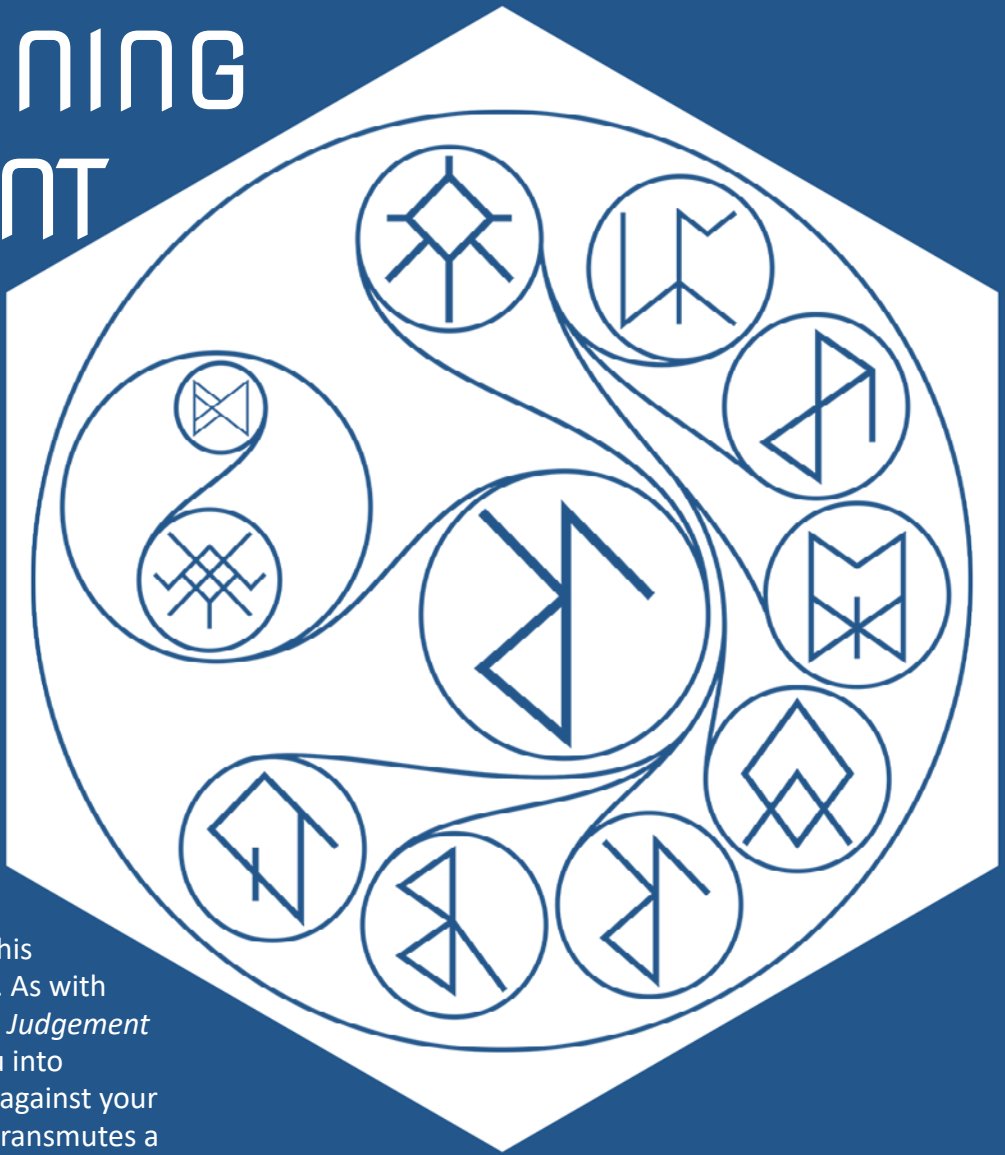
THUNDERSTRUCK

NOTATION

Create Lightning in an area Contained to the circumference of the array and to a length 1,000,000 that of the array's diameter. Apply to this the effect of a Containment field 1/10th as deep as the array's circumference that excludes Lightning. Cast from the Right Hand.

INCANTATION

Behg Fîtî Blîkse Dün Môk Non Ob Hohd Ant Rônde Ant Mürgrot Durii Cob Kîtî Dün Fîtî Ob Hohd Ant Rônde Sôner Blîkse Cob Kîtî Ent Fin Regahnd.
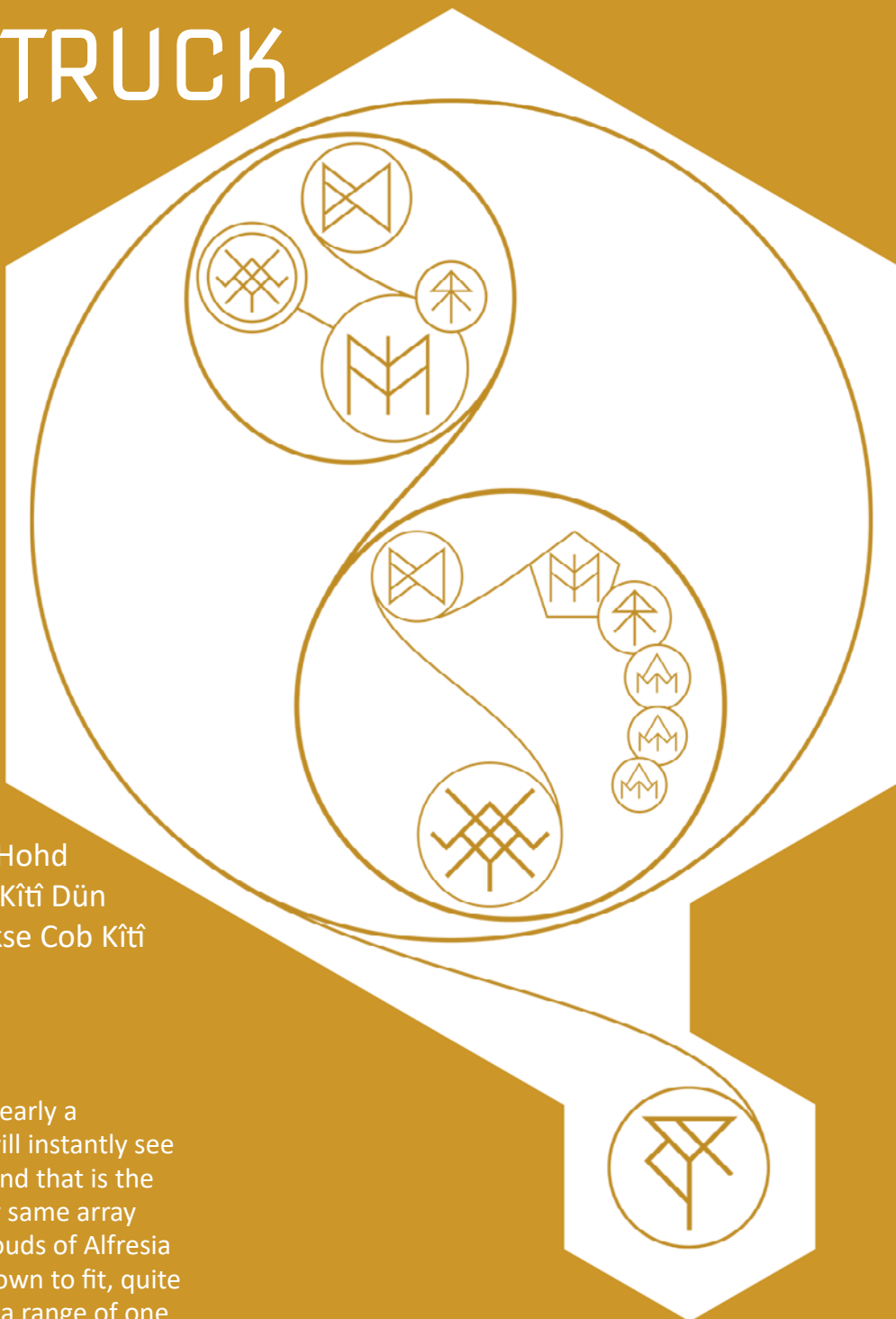
DESCRIPTION

    It's quite a mouthful to incant and nearly a paragraph to notate, but I'm sure you will instantly see something familiar in this incantation, and that is the *Hammer of the Gods* array. It is the very same array that the airships that float above the clouds of Alfresia use for their thunder cannons shrunk down to fit, quite literally, in the palm of your hand. With a range of one million times the array's (or in this case your hand's) circumference, the *Thunderstruck* incantation can hit anything that you can see. For all that, I am sure you can imagine what would happen if you link yourself to an object by a bolt of lightning. You might kill it, but you know you will die in the process.

    That is why the secondary array in the top left exists. It is the safeguard that a person needs that the airship can do away with. If a wooden cannon gets destroyed, it means nothing, however a person only has one chance. The secondary creates a containment field right against the array (or hand) that excludes lightning. This means that the lightning bolt can still fire (because the secondary array does not cover the whole containment field created by the primary array), but the lightning created can not bounce back or even touch your hand. It will be as if the lightning starts in mid air.

    While a lightning strike is an immensely powerful weapon to have in one's arsenal, just remember that because of the safeguard secondary array, the incantation is quite long, which means it will not be easy to ever use this in combat.

TIME SAVER

NOTATION

Stop Time, in an area as wide across as the array with a depth 1/10th the array's diameter, if Fire, Iron, Wood, Gold, Silver, Lead, Tin or Copper is present.

DESCRIPTION

They say that time is a thief that steals from us everything we love. Every heartfelt moment of joy, gladness, love or sadness is snatched away by time. Our youth, our vigour, our strength is all stolen by time. And even our friends and loved ones will be taken, one by one, by Time until he comes to take our very lives. For something so cruel, yet so powerful, it seemed only fitting that man himself bring time to heel and force time to save what it also takes.

The *Time Saver* array, other than being a pretty exercise in radial symmetry, works in a straightforward manner, but as we have come to learn about the runes and arrays, it is not in their design and function but in their application that they truly come into their own as ingenious tools for survival and profit.

This array works by stopping time if it senses any of the four materials. That's it. The trick here, though, is that by creating eight functions in the array that do precisely the same thing but with different If-Then triggers, we create a situation best described as "stop time If this Or that" where if we simply had one function with all eight triggers it would have been "stop time If this And that And the other thing". Laying out the functions in this manner give this defensive array a much greater flexibility.

This array is most commonly seen on bucklers and shields where it can be expertly wielded to target incoming musket and pistol rounds and melee weapons; however the skilled at heart and deft at hands could of course wear this on their clothing, but they had best be careful not to accidentally stop time in any part of their body they wish to keep.

While stopping time would indeed stop any round, arrow, blade or cudgel coming your way, logically they would continue on their path was this effect wore off.
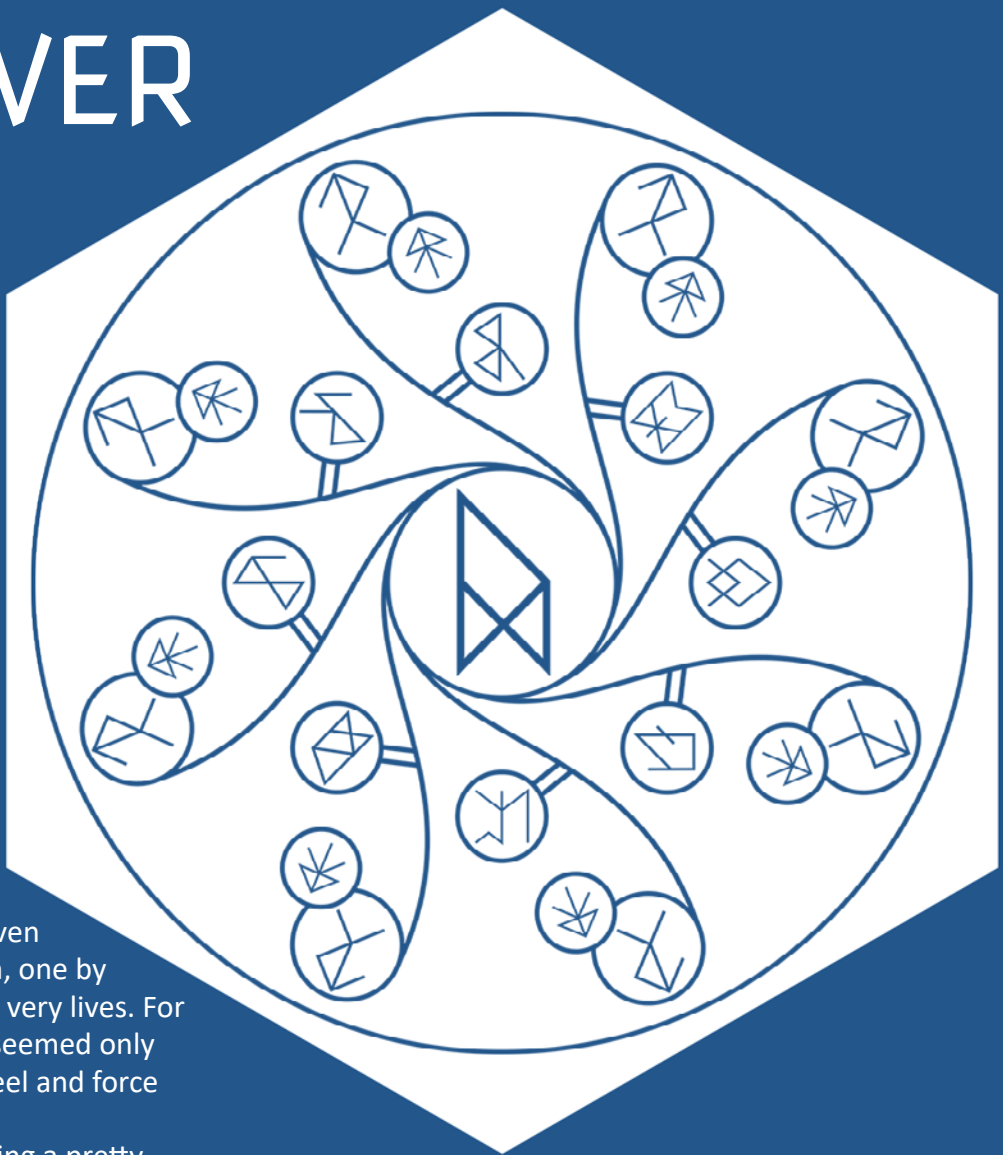
This is why you should be quick on your feet if you choose to use this array as it will only give you a few seconds at best to move out of the way before the energy in the array wears off. This few seconds should be all the time you need, though, to turn the tables on your opponents. A blade aimed at you that is now suddenly frozen in midair will surprise the most cynical of killers, if only for a heartbeat, but that is all the time you need to end the fight. Similarly, a musket round caught in midair in front of your chest can easily be sent on its way once you've stepped aside, and if you managed to position yourself between two opponents then they have done the job for you.

The *Time Saver* array requires a lot of skill to be used properly, but the rewards are well worth the time put in.

TRANSCENDENCE

NOTATION

Transmute Human into Light and Sound at a frequency of 250 Hz if Human Blood is present.
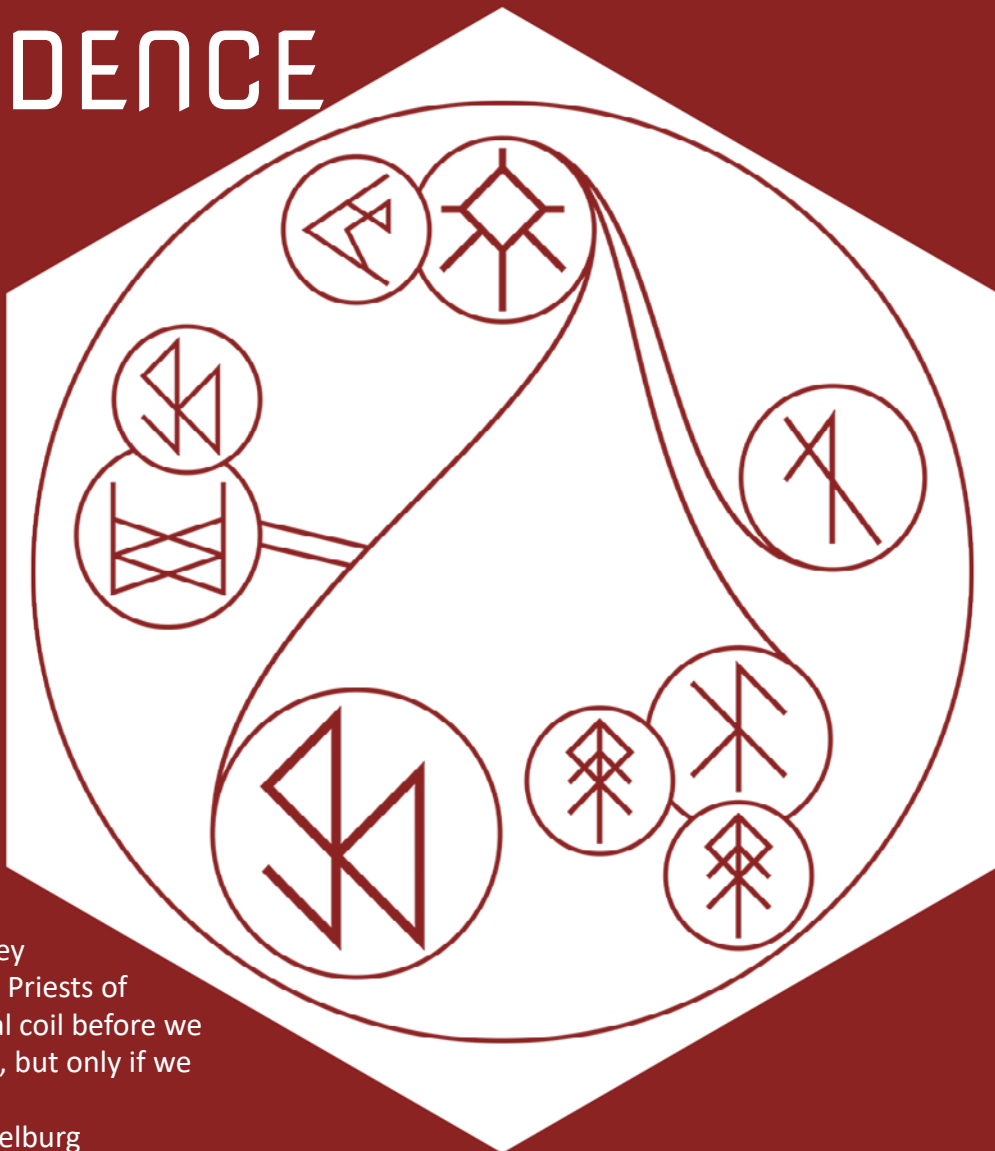
DESCRIPTION

"Transcendence" literally means to "climb above" and most use this to describe a spiritual journey and exercise to climb above this world and reach a next plane of spiritual existence. Some monks fast and meditate for years before reaching this transcendent state where they claim they are in tune with the music of the world. Priests of course say we must first shed our mortal coil before we will reach transcendence in the afterlife, but only if we are faithful to their gods.

The footmen on the streets of Middelburg however have found a far quicker means to achieve enlightenment: at the end of a barrel.

The *Transcendence* array is named as tongue-in-cheek, ironic and sarcastic as all arrays, but at least it gives a good show. This array is only possible because of the Invert rune. When applied to the *Transmute* rune, the Invert rune inverts the flow of transmutation. Rather than light and sound being transmuted into humans, humans are now transmuted into both sound and light. This is the only way that you can transmute one thing into several.

The other interesting thing to note is that this array produces a specific frequency of sound, 250 Hz to be exact. This is because the *Sound* rune produces exactly 1 KHz frequency when created or transmuted. By slowing the sound, as in real life, it lowers the frequency of sound produced. And 250 Hz gives almost perfectly the key of B.

So with all this light and show, what exactly happens? Well once the musket or pistol round enters the body, it transforms the person it enters into flash of light with an accompanying blast of sound. With the energy contained within a human body, this is no small flash or bang. The light can be seen from blocks away and the sound is like a church bell hit with a war hammer. Other than giving the poor unfortunate a proper send off with all the pomp and circumstance of an emperor, it also serves to blind, deafen and disorient the victims comrades, giving you and yours the chance to kill them as well.

Unfortunately, once someone has "transcended" everyone and their mother will know something is amiss and the constables won't be far behind. Best to use this once and get done with your business before your hear the constables' whistles.

49

UNLUCKY ROUND

Pull Human at a speed of 512 m/s.

DESCRIPTION

Physics is a funny thing and often counter-intuitive until you give it some serious thought, and if you want to be the best runist you can be, then you surely must give good old physics as good and serious a thought as you can.
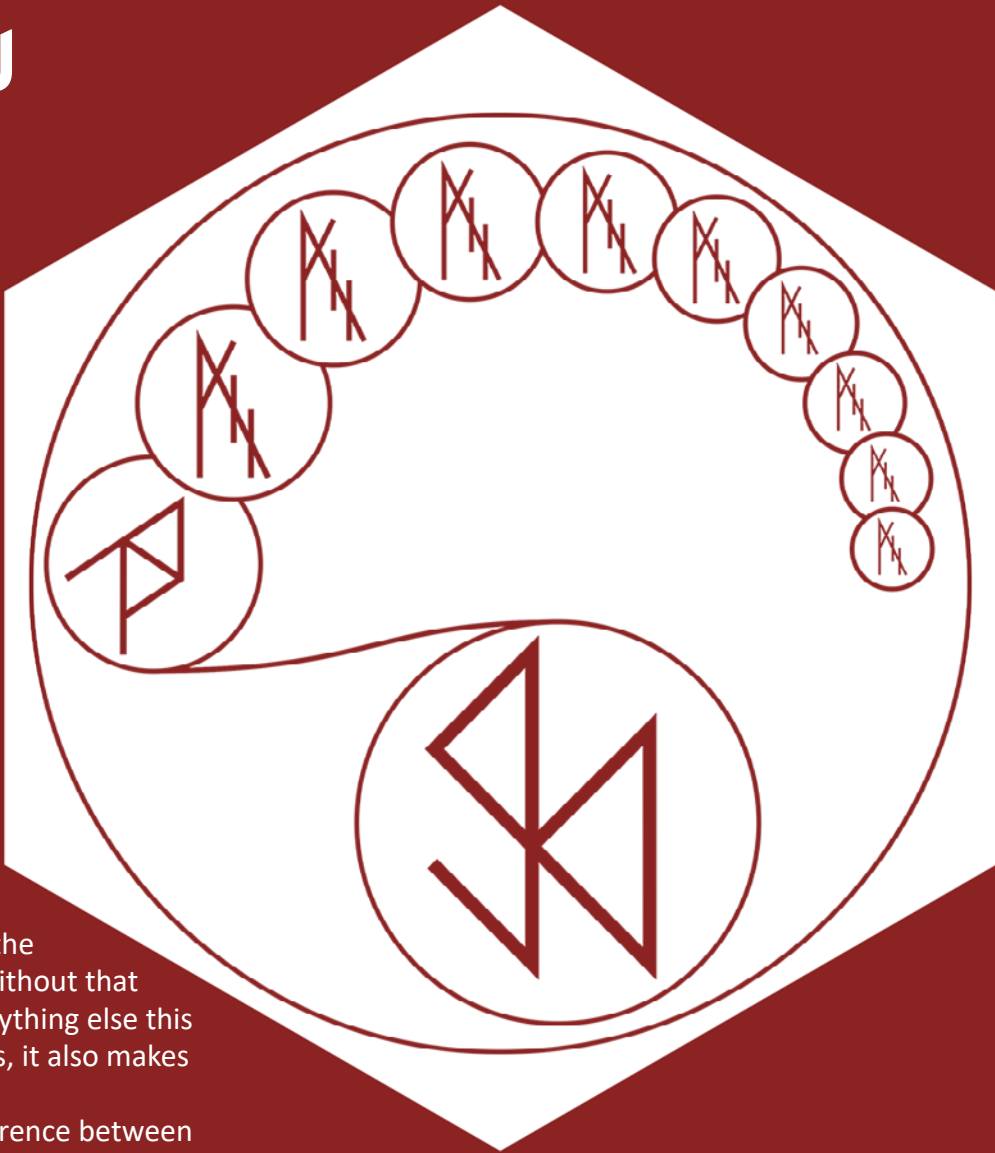
One of the three laws of motion in physics is that every action has an equal and opposite reaction. This is just one of those things that has to be, the universe wouldn't exist as we know it without that particular law. Lucky for us, among everything else this physical law does for us in our daily lives, it also makes this array work.

That is because there is no real difference between a push and a pull and there is no particular emphasis placed on the direction in which a force is applied. What this means is that there is no real difference in the impact between you running into a car at 10 kph and a car driving into you at 10 kph. There also isn't a difference between the magnet holding onto your fridge, or the fridge holding onto your magnet, there's just a force applied in a specific direction and the universe takes care of the rest.

All that is precisely how the *Unlucky Round* works. As it's name implies, it is inscribed on a musket ball, but this round isn't ever fired from a musket or a pistol. Rather it is left around wherever it can do the most damage as a type of boobytrap. Then, whenever someone gets close to the round, it will attempt to pull that human toward it as a speed of 512 meters per second, but just as your magnet can't pull your fridge towards it, the round can't pull the human closer. Instead, just as with the fridge, the musket ball will be propelled towards the human at 512 meters per second.

In a twist of irony, thanks to the third law of motion, the human acts as their own fatally fired musket.

Now, it must be mentioned that in all cases this array must be modified in some form or fashion, most often with a containment field within which the array will work. We haven't put that here as it will depend entirely on the context that you find yourself in, but it can't just be left as is or it will go seek for the nearest human anywhere on the planet if it has enough energy.

Also, while this array has to be precharged before it can work, you should never precharge it before you place it as a trap as you will be the nearest human to it and it will come straight at you.

And lastly, if you want to do even more damage, remember that you can inscribe other offensive arrays onto the same musket ball as the *Unlucky Round*, meaning that when it does hit someone, the other array will activate and cause quite the calamity.

VANITY'S TOMB

NOTATION

Stop Time, excluding Light, in a Domed area 100 times the array's size and apply to this the effect of 1 lumen of Light Created per square metre.
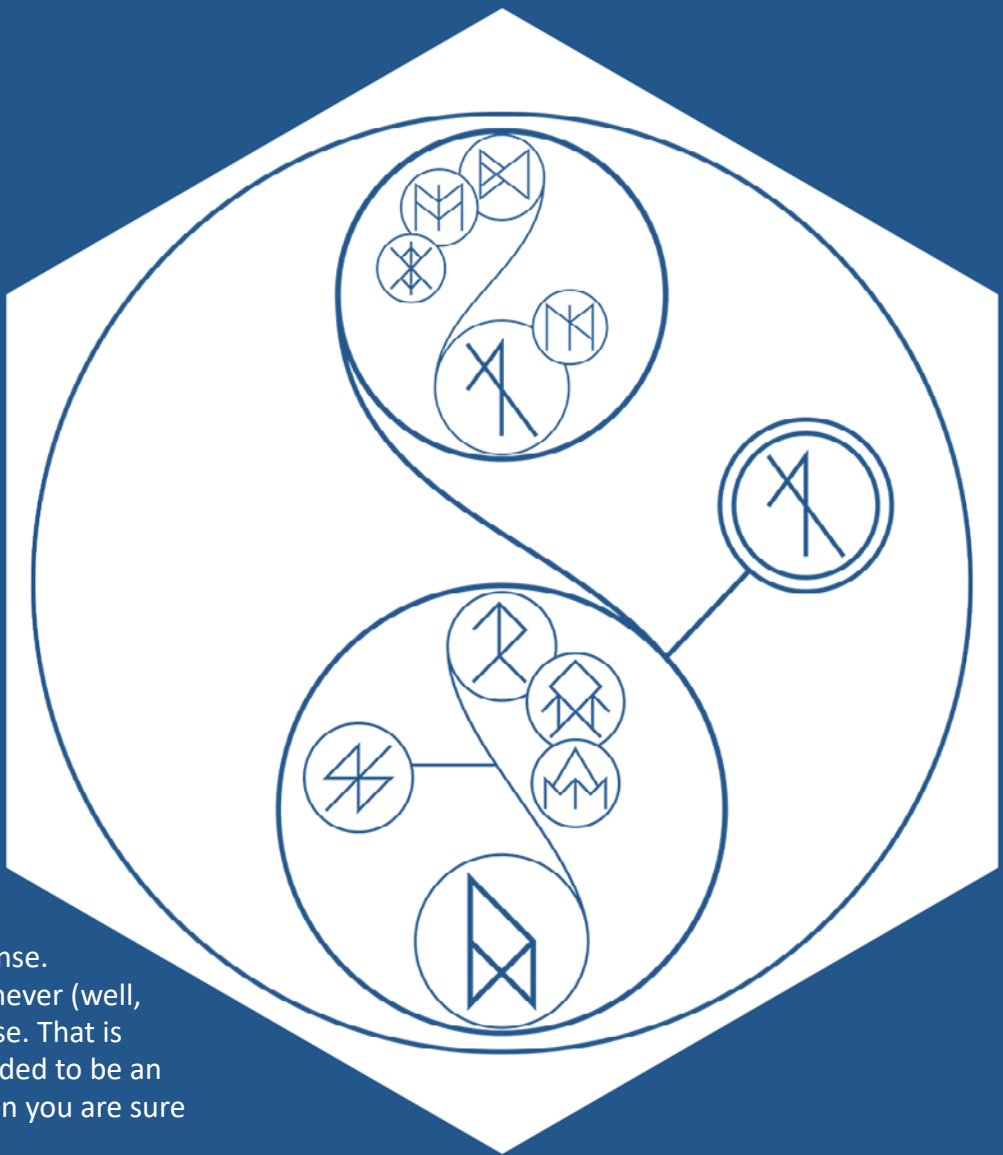
DESCRIPTION

No other defensive array has a 100% success rate. No other defensive array can save you every single time. That is a title and award only the *Vanity's Tomb* can claim. However, saying that this array "saves your life" is perhaps only correct in the technical sense. Should you ever use this array you will never (well, almost never) be able to do anything else. That is because this array stops time. It is intended to be an array of last resort, to be used only when you are sure you are going to die.

The *Vanity's Tomb* is normally inscribed upon a small disk 10 cm in diameter so that the effect is 10 metres across. If you think you are about to die, simply touch stone to disk and you will be saved from death, only to be frozen. But they say it's better to be trapped in a type of suspended animation for who knows how many decades or centuries with the slim hope that someone in the future will be able to save you, than to be killed.

There's a few interesting features about the *Vanity's Tomb* than simply stopping time. The first is that it stops time for everything, except light. This is very important, because if it didn't exclude light from this effect (and thus light was stopped along with everything else) all you would see from the outside the effect is a black dome, since if light can't move, it can't enter our eyes and we can't see where it came from. So if you ever want someone to find your unliving statue and hopefully make preparations for your now-quite-predictable-future, you want light to be able freely move throughout the array's effect.

Other than the trigger for the array (which is fairly standard in order to save up enough energy to freeze all matter within 10 metres for decades if not centuries) the second interesting feature about this array is that is meant to glow. Unlike the ability to allow light to pass through the time frozen dome, this feature is for the good of others, not the one stuck inside. If you chose to freeze yourself for the foreseeable future, you don't want some poor innocent bystander to walk past and unknowingly get a hand or foot stuck in the time-field and then be glued to your dome for the rest of their life, now do you? That is why this dome glows ever so softly and gently, to warn others not to come closer.

WIND SHEAR

NOTATION

Create a Containment Field as wide across as the array and 100 times as long that excludes Animals, Wood, Stone, Iron and Light if these materials are present.

DESCRIPTION

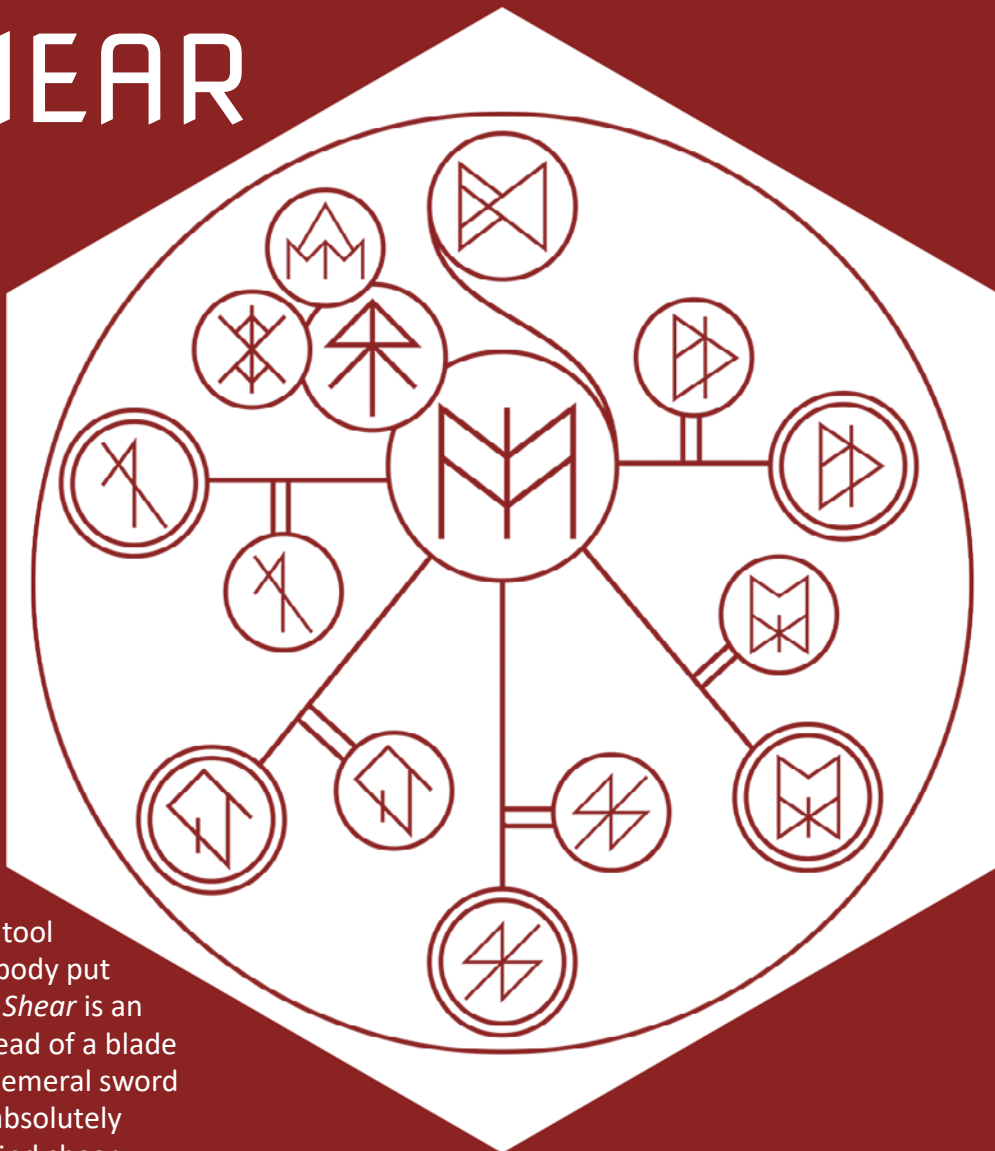Not as clumsy as a musket. An elegant weapon of a more civilised age.

The *Wind Shear* array is more than just an array, in fact it cannot even function properly as just an array, it is a tool and a weapon, it is an extension of the body put to beautiful if lethal purpose. The *Wind Shear* is an array put on the top of a sword hilt instead of a blade and the rest is easily imagined. This ephemeral sword can cut through nearly everything and absolutely nothing can stop it, not even another wind shear sword, for there is really nothing to stop other than a containment field and no containment field can stop another.

The array as shown above is incomplete. In order to be an effective sword, this one must be able to be "sheathed" and such it can't be "on" all the time or you might cut your own leg off by mistake. As such the *Create* rune and affect line requires an additional If-Then statement that can act as a switch (most often a physical one on the sword) through which you can turn on or off the containment field. Whatever material and rune you use to trigger the "on switch", remember that you can't then use that as a material that this array destroys.

Which leads us onto the next part...

There are only five materials that this array destroys, but this is merely for ease of viewing. True *Wind Shears* are easily adaptable to the environment and to the skill of the person drawing it and so you can add as many materials as you want in there. Some *Wind Shears* have thirty or forty materials that it destroys, ensuring that it covers all its bases.

Just remember to keep the *Light* rune in there as it serves two purposes. Firstly, it acts a guide for where the "blade" of this sword is, so you don't under-or overestimate its length and cut off something of yourself that you'd rather not part with. Secondly, a midnight black blade that can cut through anything and can appear from thin air is as useful a negotiation tactic as the stoutest cannon. Many a man has backed down from a fight when a wind shear sword has been turned on, knowing what comes next.